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Egyptian Ministry of Health and Population Intranet/World Wide Web Site Strategic Plan

June 1998

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Abstract

The goal of the proposed Ministry of Health and Population (MOHP) Intranet/World Wide Web is to support communication and coordination activities within the MOHP and between the Ministry and its external stakeholders in a manner that is timely, reliable, and cost-effective. Based on discussions with MOHP stakeholders and other experts, a website strategy and implementation plan was developed. Phase I of the website was also created with the help of programmers from the MOHP. This report summarizes the strategic principles on which the site is based, a detailed implementation plan, critical success factors, and other key recommendations and caveats.

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Acronyms

AOL	America Online
EIS	Executive Information System
FTE	Full-time Equivalent
HTML	Hypertext Markup Language
MOHP	Ministry of Health and Population
NICHP	National Information Center of Health and Population
PHR	Partnerships for Health Reform
URL	Universal Resource Locator
USAID	United States Agency for International Development

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Executive Summary

The goal of the proposed Ministry of Health and Population (MOHP) Intranet/World Wide website (hereafter referred to as the website) is to support communication and coordination activities within the MOHP and between the Ministry and its external stakeholders in a manner that is timely, reliable, and cost-effective. As a result, the proposed site is "user" focused, i.e., it provides a platform for information exchange for a comprehensive set of users, going beyond the conventional one-way information transfer function to which most websites are limited.

The website design is based on a set of strategic principles and consists of 12 broad categories of information transfer, some of which will focus on providing health- and health reform-related information to users such as the general population, clinicians, and hospital administrators. Just as importantly, the site will permit the same users to communicate back with the central Ministry by enabling them to transfer data, complete online surveys, and provide feedback. Finally, the site would be a platform for many of the users to communicate and collaborate with each other, in addition to doing so with the Ministry.

The proposed website will be implemented in three phases. Phase I (months 1–3) will comprise primarily dissemination features and include some feedback capabilities. It will also include efforts to market the site and track site audience. Phase II (months 4–12) will incorporate online data collection and automated transmittal, and development of the Ministry Intranet. Phase III (months 13–24) will include Intranet functionality and collaboration features, and result in a fully multimedia World Wide website.

In order to design and maintain the website efficiently, a distinct organizational unit is proposed. This Internet Unit, housed within the Resource Center of the National Information Center for Health and Population (NICHP), will be staffed by a high profile website coordinator who will be supported by programming, graphic design, and copyediting staff. The Unit will receive content as well as site approval from a Ministry-wide steering committee that will meet quarterly to review plans and progress. Standardized input forms are being designed to make the transfer of information from the many parts of the organization to the Internet Unit as efficient as possible.

To test the robustness of the strategy and produce a tangible outcome, the first three levels of the website have been created in HTML. Critical success factors were articulated to provide implementation guidelines for the site.

The strategy and the content are proposed in this document with the caveat that while the website was designed with an intended target audience in mind, few users in Egypt have computers, let alone high-speed access to the Internet. Even fewer users have the training to effectively use the Internet. Therefore plans for the implementation of the website must include recommendations for simultaneous provision of hardware and software as well as training. It is also recommended that an internet pilot be designed and conducted to test the effectiveness of the website and improve upon it.

1. Overview

A team made up of programmers from the Egyptian National Information Center of Health and Population (NICHP) and consultants from the Partnerships for Health Reform (PHR) worked together to design and plan implementation of a new Egyptian Ministry of Health and Population (MOHP) website.

The design team followed a structured process to conceptualize the website. First, team members reviewed the existing MOHP website and compared it with other health and government websites in Egypt and around the world. Next, they identified the audience for the new site. They then articulated the goal and strategic principles to guide the design of the website, based on the information needs of the audience. These principles guided the content, modality, and implementation direction for the website.

To demonstrate the links between the various chunks of information to be placed on the website, the team organized content on a storyboard. They then developed an organizational plan for site design and implementation, and identified critical factors to secure the success of the site. Given the breadth and depth of the content proposed, site implementation was divided into three phases extending over a two-year period. A preliminary mock-up concept of the website was developed with programmers from the MOHP. Discussion of recommendations and next steps concluded the technical assistance process.

2. Review of Websites

2.1 Existing MOHP Website

The old MOHP website was designed by Ministry programmers and prepared for approval in the spring of 1998. While the format and layout of the site were acceptable, the site was inadequate in several respects. It did not seem to be based on any strategic vision of the Ministry's mission or activities. The site seemed to be a stand-alone "solution"; it responded to no particular organizational function or challenge. No analysis had been performed to assess user needs; therefore the site had no clear "user" focus. As a result, most information on the site was interesting but irrelevant; it seemed to have been placed on the site simply because it was available. An organizational or a phased implementation plan did not accompany the site plan.

In addition, given the content of the site, the MOHP could have used it only as a one-way mechanism (like the television or radio) for communicating to users. In other words, its purpose was primarily dissemination, which means that the Ministry was relinquishing the most powerful feature of web technology – that of enabling asynchronous two-way communication among multiple parties. Finally, and most visibly, the site had a confusing organization, and was replete with poor copy-editing and writing, the latter most likely a result of direct translation from Arabic into English.

2.2 Review of Other Sites

A few related sites in Egypt were also reviewed for comparison purposes. The Healthnet site (http://www.health.egnet.net/) provides information about Egyptian health care organizations and professionals for local viewers and for the wider internet community. The site allows users to search various databases for physicians, drugs, medical centers, pharmaceutical and medical companies, and other health care providers. The site is well designed and seems to be immensely useful, but it may not have been updated in several months (or years), and as a result has become outdated. If and when the site is made current, it will be linked to the MOHP website. None of its functions will be duplicated on the MOHP site.

The People's Assembly website (http://www.parliament.gov.eg) is well designed, but it loaded very slowly even when using a 33 kbaud modem, a probable result of heavy use of graphics. Other sites reviewed were: Egypt's Information Highway (http://www.idsc.gov.eg/), RITSEC (http://ritsec_www.com.eg/), Egyptian Universities Network (http://www.frcu.eun.eg/), and the Egypt State Information Service (http://www.sis.gov.eg/).

In addition to reviewing Egyptian sites, Health Ministry sites from countries around the world—specifically, the United States, Canada, Australia, New Zealand, United Kingdom, Sweden, Denmark, Singapore, Malaysia, Japan, Mexico, Jordan, United Arab Emirates, and Bahrain, among others. These sites were especially useful in identifying links to useful health-related information.

3. Target Audience and Site Goals

Based on a limited set of interviews, the design team identified the following categories of users as the primary constituents for the MOHP Intranet/Website.

Target Audience	*Location*	*Speculated Web-relevant Information Inflows and Outflows*	*Electronic Connectivity*
NICHP Departments	Internal		
Ministry sectors (preventive, curative, family planning) and organizations	Internal	Inflows: Detailed health-related statistics via Electronic Information Systems, feedback on sectoral performance, health care reform-related information from other countries. Outflows: Information on the roles, responsibilities, special projects, and achievements of the sectors and organizations. Other: Ministry documents, procedures and policies, internal communication, searchable phone directories, etc.	None
Health care facility administrators (hospitals and clinics)	Internal/ External	Inflows: Assistance in data collection on patients, quality improvement programs, using information technology and new management techniques in providing improved cost-effective health services. Outflows: Facility management statistics, feedback on NICHP support Other: Communication with other facilities.	Low to None
Governorate information centers	External	Inflows: Training for data collection and processing, Outflows: Data transmission, feedback on NICHP support. Other: Sharing best practices with other centers	Low
Other ministries	External	Inflows: General events and activities at the MOHP Other: E-mail communication with MOHP	Medium to low
Physicians, nurses and other clinicians	External	Inflows: Access to worldwide best practices on quality improvements, clinical guidelines and pathways, training courses, test preparation, online exams Outflows: Responses to surveys and polls, patient-related statistics Other: Networking and collaboration with peers	Medium
Non-governmental organizations, researchers and policymakers	External	Inflows: Description of current MOHP projects and programs, basic information on the Ministry Outflows: Updates on projects, responses to surveys	Medium
General public, journalists, other media	External	Inflows: Reliable information on current health issues, health-related national statistics, job opportunities Outflows: Providing feedback to government re. services, responses to surveys and polls	Low to none

Based on the information needs identified above and the overall mission of the MOHP, the goal of the MOHP website can be concisely stated as follows:

The goal of the new MOHP website is to support communication and coordination activities within the MOHP and between the Ministry and its external stakeholders in a manner that is timely, reliable, and cost-effective.

4. Underlying Strategic Principles

The MOHP Intranet/Website design was based on the following strategic principles:

- The website will reflect the MOHP mission and activities. Its content and format will be consistent with the Ministry's overall communication and dissemination efforts. It will be a platform for information exchange services for the entire Ministry. As an example, the site could host the Executive Information System (EIS)and other databases that the Ministry will produce and use.

- The website will be user-oriented. In other words, it will provide information that its intended users need, in a manner that will enable them to use it effectively. This user orientation would also be manifested in the organization of the site. For example, the site will not be organized by ministerial sector (the easiest way to design a site) but instead by services offered.

- The website will not be a static one-way information delivery vehicle; instead it will be the medium for dynamic dialog within the Ministry and between the Ministry and external users, to enable the Ministry to receive feedback and collect information from its external constituents. The site will therefore include surveys and feedback mechanisms as part of routine services.

- The website will be linked to measurable performance indicators in order to measure its adequacy in meeting its stated goal. Uses of individual pages and features will be tracked via automated counter statistics as well as via user feedback surveys.

- The website will become the gateway for all health care and health care reform information for Egypt. This *clearinghouse* feature is especially important in Egypt because internet access is slow and expensive, and users may not have the resources to conduct comprehensive searches on the Web. Information would be organized and presented so as to take adequate advantage of the multimedia and hypertext capabilities of the World Wide Web while simultaneously being cognizant of the low bandwidth capabilities of the Egyptian users.

- The website would be fully implemented in both Arabic and English. This will provide access to website information to as wide a range of potential readers as feasible, given the potential target audience of Egyptian citizens, Egyptian agencies, and foreign non-governmental organizations or researchers.

5. Proposed Site Content, Organization and Modality

The design organizes MOHP website content by user groups and needs, not by the organizational structure of the Ministry. While content continues to evolve, the principal categories of content on the website are as follows:

Basic Information on MOHP

- Mission Statement
- Organizational Division and Responsibilities
- Leadership in each Ministry Sector (designated personnel accessible via e-mail)
- Ministry Achievements
- Historical Highlights

Information on the Health Sector in Egypt

- Basic Health and Population Statistics (some of these statistics will ultimately be presented via limited variable-access EIS, and initially be downloadable as Word, Excel, or pdf files)
    - Population and Vital Statistics
    - Women's Health
    - Infants and Children
    - Principal Causes of Death
    - Health Facilities and Manpower
    - Childhood Immunizations
    - Traditional Medicine
    - Occupational Health and Safety
    - Pharmaceutical Services and Drugs
    - Health Expenditure
- Information on Key Diseases and Population Groups in Egypt
    - Women
    - Infants and Children
    - AIDS, Cancer, Infectious Diseases, Chronic Illnesses, Other

Services to the General Population

- Listing of Local Hospitals and Clinics (in a database format organized by service provided and geographical location)
- Information on:
  - Healthy Lifestyle
  - Early Detection of Diseases
  - Self Management of Chronic Conditions
- Special Vaccination and Immunization Schedules and Location
- Pregnancy Care and Family Planning
- Travel Health Information

Services for Physicians

- Clinical Guidelines and Pathways
- Essential Drug Policy
- Information on Providing Quality Health Care

Services to Hospitals and Community Health Care Organizations

- Information on Improving Quality of Health Care
- Access to Collaboration Tools
  - Free (or reduced cost) E-mail Service
  - Online Discussion Forums
  - Chat Rooms on Specific Topics
  - Platform for Organizing and Running Virtual Conferences
  - Teleconferencing
  - Workflow Software
- Conducting Surveys and Polls
- Collection of Routine Data

Services for Members of the Central Ministry (Intranet function)

- Online Placement of Important or Frequently Used Documents
  - Policy and Procedural Manuals for Clinical and Administrative Departments
  - Operations Manuals
  - Searchable Phonebooks
  - Training Material
  - Calendar of Events for Speakers and Training and Other Activities
  - Electronic Forms
  - Internal E-mail
- Ministry EIS
- Internet E-mail

Current Events and News

- Information about Health-related Symposia, Conferences and Meetings
- Current Health Care News
- Job Openings at the MOHP

Research/Education Tools

- Libraries
  - Egyptian (National Health Resource Center, Cairo University School of Medicine, etc.)
  - International
- Online Health Journals
- Online Databases
- Medical Dictionaries
- Links to Universities and Programs with Health Care-related:
  - Distance Learning Courses
  - Continuing Medical Education Courses
  - Careers in Health Care and the Ministry

Links to Other Health Care-related Websites

- Egyptian Organizations
  - Center for Disease Control and Prevention
  - National Center for Health Statistics
  - Egyptian Health Care Network
- Selected Institutions Working on Health Reform
- Selected Electronic Clearinghouses
- Links to U.S. Health Care Reform Institutions
- Other International Health Care Reform Sites
- Selected USAID-funded Projects Collaborating on Health Sector Reform

Links to Ongoing Ministerial Projects

- (the link will navigate the user to a standardized summary page and to the individual websites of the projects)

Links to Internet Resources

- Basics of Internet
- How to get Free E-mail and Access to the WWW

Feedback

- Response to Surveys on Specific Topics
- Questions and Complaints
- General feedback on website

The content will not be provided in a text-only version, a strategy typically employed to enable users with low bandwidth internet access to browse websites. This is because, in such sites, version control is notoriously difficult. Also, if graphics are used judiciously—i.e., less than 30K per page—access at 2400 baud will suffice for efficient viewing. Additionally, most browsers allow the visitor to toggle graphics off, so that they can essentially view a text version without the site administrators needing to maintain a separate version. Any graphics included will have *alt* tags associated with their images, so that the user browsing with graphics-off can navigate without relying on image-based links.

The site will be fully translated between Arabic and English. The initial entry screen will offer choices between the Arabic content site or the English content site and filter viewers appropriately. Each site will run in parallel to its counterpart, guaranteeing identical information and layout between the two languages. Exceptions will need to be made in situations where the website is posting third-party information, such as published reports, for which the feasibility of complete translations is significantly diminished.

The site will be fully searchable to enable users to quickly and efficiently find information of interest. If and when the Ministry decides to place large quantities of information on its website, an anonymous FTP site will be provided for downloading large files. Each page will be tracked to monitor volume and degree of use, capturing as much user statistics as feasible. The site will include online survey conduct and processing capabilities.

The content will be structured so as to necessitate frequent updating (thereby keeping the site fresh). Eventually, the site will include imbedded messaging and communications packages that will allow users to use e-mail and participate in online discussions and virtual conferences.

6. Implementation Plan

The proposed website will be implemented in three phases in increasing order of complexity. The Gantt chart in Annex A provides a projected schedule.

Phase I (months 1-3) will focus primarily on information dissemination. There will be some feedback capabilities. This phase will begin to identify user-specific needs—for both content and training—via informal interviews and surveys. At the end of Phase I, the Minister of Health and Population, His Excellency Professor Ismail Sallam, could officially inaugurate the site.

Phase II (months 4-12) will continue to add information and also begin to expand the two-way communication features. The site will incorporate online data collection features and enable consolidated data from the district and governorate levels to be transmitted electronically. Features started in Phase I will continue to acquire more depth and sophistication. Plans for creating the Intranet will be put in place (without it becoming available) and services for hospitals and physicians will begin to be provided. This phase will also include training activities. Automated tracking to evaluate the performance of the website will also commence in this phase.

Phase III (months 13-24) will add on advanced collaboration features and result in a fully multi-media website. Phase II will also provide Intranet functionality to serve the central ministry and governorate offices. Intranet implementation assumes that the ministerial network (now under consideration) is in position.

By Phase III, the Executive Information System is also expected to have been developed, and a prototype will be available for web-based viewing by various sectors of the Ministry. The phase will also include a more in-depth evaluation of user information and training needs.

7. Sustainability Plan

The success of the MOHP website will not be measured by how well-designed the site will be when it first goes online, but by how well it is *sustained* in the coming years. Sustainability of the site will be driven by its degree of usefulness and relevance for users, which in turn will depend on the quality, timeliness and reliability of the information provided on the site.

Issues such as these drove the long-term sustainability plan of the MOHP website. The goal of the design team was to imbed sustainability features into the management plan of the site such that sustainability becomes an implicit part of site maintenance and upkeep, and not remain an external talking point. The plan includes recommendations for a web creation and maintenance organization and a mechanism for obtaining consistent and ongoing Ministry-wide input.

7.1 Organization and Functions of the Website Team

The design team recommended that the MOHP website be managed by a newly created Internet Unit within the NICHP Resource Center but draw site content from the entire Ministry. In order to successfully maintain the website as currently envisioned (and to continue to enhance its features), it is recommended that the following staff roles be added on a permanent basis (the number of full-time equivalents (FTE) per position is undetermined):

- Senior policy-level coordination
- Content editing
- Graphic and production design
- Programming (html and database)

Figure 1 describes the relationships among these positions and how they relate to the larger organization.

Table 1 lists staff positions anticipated for the Internet Unit.

Figure 1: Functional Relationships for the MOHP Intranet/WWW Site

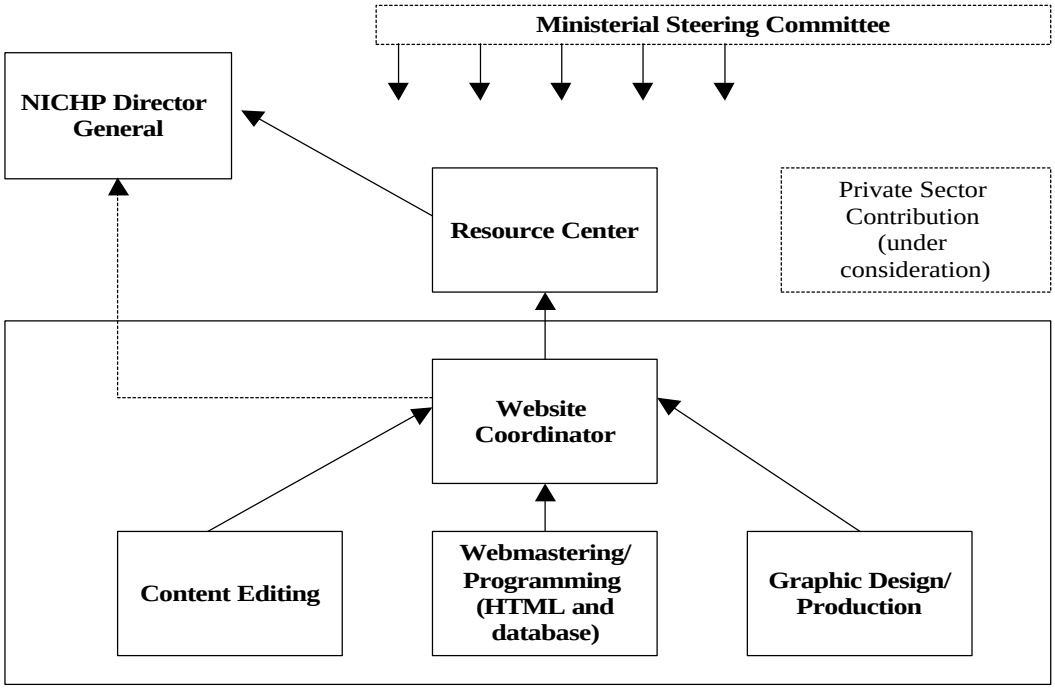


Table 1: Staff Positions for MOHP Intranet/WWW Site

Position	Duties
Coordinator	▲ works with other groups in the ministry and establishes relationships with the individuals that will feed content to the site; ▲ understands the site strategy and maintains the site vision; ▲ translates the needs of other departments into business requirements and site features; ▲ prioritizes the requests of the users and other departments
Content Editor	▲ develops new content ▲ facilitates chats and moderates bulletin boards as they come up ▲ edits content from other parts of the MOHP ▲ organizes the translation of content in English and Arabic
Graphic Designer	▲ creates graphic elements ▲ designs new pages as necessary
Webmaster and HTML Programmer* (more than 1 FTE)	▲ programs basic pages on the site ▲ moves and tests content from test system to production system ▲ installs new software ▲ maintains servers
Database Programmer*	▲ implements new features ▲ systems integration and database programming skills

*The programmers may also share database design and development functions.

The Unit as a whole will work together closely and will be responsible for:

- Creating and hosting the website content and graphic design (internally or through external procurement),
- Supervising appropriate translation of content,
- Registering the site with local and international web search services and continued publicizing of the website,
- Marketing the website internally via a Ministry newsletter and postings or flyers and ensuring that the current site address is posted on all Ministry stationery and documents,
- Marketing the site to key external users via direct mailings and incentives and to the general public via press notices,
- Calling and managing steering committee meetings and coordinating input,
- Securing adequate quality control on content added to the site,
- Maintaining the site (technical support and content),
- Regularly updating the website (daily or weekly basis),
- Responding to incoming e-mail, and directing e-mails to specific Ministry sectors,
- Tracking the performance of the website,
- Assessing the utility of the website for key users (e.g., hospitals),
- Identifying and resolving user problems related to access, where access refers both to physical access to computers *and* to the ability of the users to efficiently use the Web, and
- Arranging and managing internet-related training and teaching courses for users within the Ministry and outside.

7.2 Obtaining Ministry-wide Input

While the site will be housed and maintained within the Information Center, it must be emphasized that it is not the site of the Center but that of the entire Ministry. The site will therefore need ministry-wide input in a standardized fashion at regular intervals. It is therefore recommended that an organization-wide *Steering Committee* (with the Unit as the clearinghouse of all new information) be created to guide the creation and maintenance of the MOHP website. In order to represent the Ministry, it should include at least one representative from each sector and organization of the ministry. The Steering Committee could meet quarterly (more often during the design phase) to provide web–relevant content to the Internet Unit and approve site.

8. Critical Success Factors

Throughout this report, elements that will determine the success or failure of the website have been listed. To emphasize their importance, they are summarized in this section.

- The website must be the platform for the entire MOHP communication and dissemination plan, not merely that of the NICHP. It must have the support of all the sectors and organizations of the Ministry.

- This in turn means that the site must host content that is useful to its users. If it does not, it risks losing support from senior members of the Ministry who make the funding implications that affect the quality of the website.

- At all times, the site must have a high profile and stay visible, but especially in the initial stages. Having His Excellency Professor Ismail Sallam, the Minister of Health and Population, inaugurate the site and appoint a senior member of the NICHP as the site coordinator can ensure this.

- The site must stay current. To ensure this, the proposed steering committee must stay active and be involved with development of web content. This also means that the Internet Unit be aggressive throughout the lifetime of the site, not merely during the design phase.

- Since most users, either internal or external, have no computers or internet access, the website development process must be accompanied by the provision of computer hardware and software to users (or a pilot subset thereof).

- Similarly, given the low technical and computer illiteracy of most users, access is of no use unless accompanied by training on how to effectively use the Internet. The training must be provided to both internal and external users.

9. Current Progress

In order to test the robustness of the strategy discussed above and to produce a tangible outcome of the design process, the design team created the first few levels of the website. One screen shot of the site is reproduced here (Figure 2) and others can be viewed in Annex B. As the screenshots show, the mock-up site focuses on content and organization and not on graphic design. The site displays some of the most important features of design discussed throughout this report and summarized here:

- *User focus* – The site is designed for users with computers that have low resolution. The content is organization by topic of interest for a typical user, not organizational structure of the MOHP.

- *Interactive forms and data collection* – The site can be used to collect unit-, district-, and governorate-level data reliably, inexpensively, and quickly. To demonstrate the process, one of the standard forms for data collection was placed online as a test. In addition to data collection, the form was designed to ensure:

  - Completeness – if any cells in the form were left empty, the user would be prompted to fill in the cell before being allowed to submit it

  - Reliability – if any cells were given unexpected values (for example, if instead of a numeric character, the user places a letter) the site would remind the user to make the correction.

- *Online data and output display* – The data entered online can be viewed, verified, and processed automatically (or manually if desired) and summary results can be viewed directly on the Web, without going through lengthy bureaucratic procedures.

- Site confidentiality (Intranet function) – Access to specific sensitive content of the website can be restricted to specific MOHP levels. For example, in the mock site, the form discussed above is available only to specific users within the Ministry, i.e., those who have password access to the particular level of the Intranet.

- *Two-way communication features* – Users at all levels can provide general or specific feedback about the site or any comments or requests they have for their representatives.

- *One-stop shop for relevant links*—The website provides links to Egyptian, Middle-Eastern and international sites for research and collaboration. See Annex B for details.

- *Techniques for Keeping Site Fresh*: To keep the site interesting for repeat users, it is designed to be frequently updated.

The mock-up site also provides full text searching capabilities. Annex B presents screen shots of the site mock up. Programmers at the MOHP designed the site.

Figure 2: Mock-up of MOHP Website

10. Site Marketing and Audience Tracking[1]

10.1 Marketing

10.1.1 Links

Most visitors access a site from other, related websites, not from search engines, and reciprocal links with high-traffic/high-quality sites of related organizations are by far the best way to generate traffic. Sites in Egypt and other countries will be identified and contacted so that direct links can funnel more visitors to the ministry site.

10.1.2 Search Engines

The site will be registered with as many search engines as possible. Several engines (Yahoo, Lycos, Magellan, InfoSeek, AltaVista, Webcrawler, and Excite) generate the lion's share of U.S.- and European-based searches. Local site administrators will also identify search engines in other countries of interest, as well as those that may support Arab-language searches.

10.1.3 Meta-tags

Meta-tags are hidden codes that are imbedded within web pages, but invisible to the browser. Search engines weight these tags more strongly than text on the page (which is also indexed). Site administrators should develop a comprehensive list of every key phrase associated with various content on pages that a searcher might use intending to find that particular page. These tags, combined with proper registration of the site with search engines, will lead to an increased volume of traffic and higher visibility within search engine results.

10.1.4 Kiosks

Site administrators should consider funding dedicated kiosks in hospitals, clinics, universities, government facilities, and similar areas where interested parties are likely to notice. Since many individuals and organizations may not have ready access to the Internet, kiosks are an excellent vehicle for promoting awareness and use of the site.

[1] Contributed by A.C. Doyle, technical consultant, and Nathan Wright, programmer

10.2 Audience Analysis and Tracking

Understanding the MOHP audience is the core of the site development and maintenance process. It allows the organization to target the content to the visitor and effectively deliver the right information to the right people.

10.2.1 Web Statistics

There are a number of sources on the Web that report web usage statistics. Some of these sources provide relevant data free of charge, while others charge fees. These services report regional and country web statistics for the percent of population online, frequency of use, communications connection speeds, reasons for using the Web, and other demographic information. See site www.stattrax.com as an example of a fee-based service. Such a tracking system can also be built in-house.

These statistics are useful for measuring the percentage of the MOHP audience that is using the Web, and they can be useful in prioritizing which audiences to build for first and which content to include. They also keep tabs on the technological capabilities of the audience (browser versions, baud rate, etc.).

10.2.2 User Registration

User registration allows the site to gather specific information on the type of users who are visiting their site. If users are asked to give information, there typically needs to be a reward for them to provide this information, e.g., access to special databases or coupons for special services, etc.

An alternative way to get information from users is to use surveys on the site to learn about their interest and reasons for coming to the site. The feedback mechanism is another effective and non-invasive way to learn more about the visitor. Since surveys are anonymous, bogus and facetious entries are far more common, and must be interpreted accordingly. Additionally, sampling control is more difficult.

10.2.3 Cookies

Many sites use cookies to track visitors on their sites. This technology, which is part of the browser, allows the programmers to assign a unique ID (identifier) to the visitor's computer. Cookies will allow the Internet Unit to determine and track such things as the number of times a user has come to the site, if he/she have viewed a page, the date and time of the last visit, and preferences that the visitor might have.

This can be used in conjunction with the registration process, whereby the user registers once and is automatically identified in future visits by a cookie.

10.2.4 Tracking Software and Web Server Reporting

The market offers a range of tracking software applications that consolidate into a comprehensible format the behavior and patterns of the visitors to a site. These tools report the number of unique visitors to the site, the number of times a page was viewed, the peak usage times of the day and week, the average number of pages that visitors see, the average length of time that visitors spend on the site, and the countries and companies the visitor is from.

Such tools can detect which browser and operating system the visitor is running but it cannot determine the connection speed. Nevertheless, looking at the type of domain of the visitor and making educated guesses about the type of connection approximates analysis of this. For example, if a visitor comes from AOL (America Online) or another internet service provider, one may assume that the user is dialing into the network. On the other hand if the visitor is from a large hospital or business or government facility, chances are that the connection is via a T1 or other high-speed connection.

Most web servers are capable of logging the referring URL (universal resource locator), which is particularly helpful in understanding which links brought the user to a particular site.

10.2.5 Focus Groups

To truly understand what specific categories of visitors like and dislike, which parts of the site are ignored or misunderstood, how people feel about ease-of-use and graphic quality, etc., focus groups are an indispensable research tool. Cookies and web server tracking only tell site administrators hard facts about referring websites, domain names, etc. Surveys and user registration answer only those questions the site administrator has asked. In contrast, focus groups elicit opinions that site administrators might not have considered: is the font size too small, does certain wording or pictures cause offense, do the colors clash, etc. Two focus groups of eight to ten individuals per user category would provide invaluable feedback. Non-users can also be included, in an effort to ascertain why they are NOT visiting the site; obviously the opinions of non-users are impossible to track via any web-based technology.

11. Hardware and Software Needs[2]

This chapter outlines a number of features that require support from a variety of technologies. The following sections outline the hardware, software, and communications requirements of the MOHP website project.

11.1 Hardware

There should be two web servers, one for the test system and another for the production environment. The test and production environments could be on the same server but for performance, security, and redundancy reasons, it is our recommendation to have them on separate boxes. The servers should be equipped with sufficient memory and hard drive space.

At this time there are not enough details available to make definitive recommendations on machine requirements. This will depend on server volume, number of pages, and complexity of the programming and integration with legacy applications.

11.2 Software

The first choice that must be made is the operating system under which the server will run, UNIX or Windows NT. This decision is really an individual preference and is usually determined by the in-house expertise and what the programmers and webmaster feel comfortable with. Most of the software on the market supports both environments.

Other software requirements include:

- Web server software
- Search engine
- Database software and database server software
- Chat server software
- Bulletin board server software
- Listserv software packages[3]
- Other E-mail server software

[2] Contributed by A.C. Doyle, technical consultant, Nathan Wright, programmer

[3] A Listserv is a powerful tool to send e-mail communications to site visitors as a means of keeping them informed of new content and features on the site and to encourage repeat visits.

The degree of need to integrate with legacy databases will determine which database is preferable.

11.3 Communications

To support simultaneous connections to the site, there should be a T1 line that is dedicated to the network that these servers are on. The T1 line can also support internet access in the NICHP Resource Center to provide high bandwidth access to the public and Ministry users.

12. Next Steps

The following are the recommended next steps to complete the design of the MOHP website:

- Establish the Internet Unit within the NICHP and transfer all website-related functions into the NICHP. This would include finalizing the Unit staff and job responsibilities.
- Establish the MOHP-wide Steering Committee and begin to receive input from ministerial sectors, organizations, directorates, and special projects.
- Continue content creation, graphic design, and implementation of the site (including simultaneous development of the site in Arabic and English).
- Plan for marketing the website using one or more of the tools described above.
- Evaluate and resolve technical and security constraints (including procurement for server and firewall hardware and software).
- Have a technology expert evaluate the web strategy and content.
- Register the site with search engines and initiate site marketing plan (internal and external).

Once Phase I of the site has been completed, the site can be announced and made available on the World Wide Web. Performance tracking and user evaluation could also begin at this stage.

It is also recommended that an internet pilot be planned and conducted to assess the usefulness of the site and identify topics of user interest. Given the diverse range of users and their interests, the pilot could focus on a particular set of users (for example, hospitals and clinics). The pilot would include provision of basic hardware and software to a select set of users and include user training and workshop.

It may also be useful to provide web access and training to selected MOHP staff to evaluate the site as well as lay the foundation of the MOHP Intranet.

13. Ongoing Technical Assistance

While the bulk of the content development would take place within the NICHP, the PHR consultant team is willing to provide ongoing technical assistance, advice, and feedback on the content and design of the site through the completion of Phase I and possibly beyond. For the next few months, the team will continue to provide technical assistance in the following ways:

- Reinforce site's focus on strategic goals of the MOHP.
- Guide the logical organization and presentation of the content.
- Provide support on the organization and writing of the individual sections (English only).
- Assist in the location of appropriate links for research, education, and collaboration.
- Evaluate the technology needs of website hosting and security.

In addition, support can be provided in the following areas:

- Planning the internet pilot, training, and workshop sessions.
- Use and integration of advanced web tools (for example, pointcasting and just-in-time training).
- Development of Ministry-specific web-based applications (for example, mathematical models and decision-support tools).

Many of these functions, especially those in the first group, can be performed remotely via e-mails, phone calls, and faxes.

Annex A: Gantt Chart of the Proposed Phases of Development

Table A-1: MOHP Website Rollout Schedule

Activities	Phase I			Phase II									Phase III											
Month*	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**
i. Basic Information on MOHP																									
Mission Statement																									
Organizational Division and Responsibilities																									
Leadership in Each Sector (designated personnel accessible via e-mail)																									
Ministry Achievements																									
Historical Highlights																									
ii. Information on the Health Sector in Egypt																									
Basic Health and Population Statistics																									
Population and Vital Statistics																									
Women's Health																									
Infants and Children																									
Principal Causes of Death																									
Health Facilities and Manpower																									
Childhood Immunizations																									
Traditional Medicine																									
Occupational Health and Safety																									
Pharmaceutical Services and Drugs																									
Health Expenditure																									
Information on Key Diseases and Population Groups in Egypt																									
Women																									
Infants and Children																									
AIDS, Cancer, Infectious Diseases, Chronic Illnesses, Other																									
iii. Services to the General Population																									
Listing of Local Hospitals and Clinics																									
Information on																									
Healthy Lifestyle																									
Early Detection of Diseases																									
Self Management of Chronic Conditions																									
Special Vaccination and Immunization Schedules and Location																									
Pregnancy Care and Family Planning																									
Travel Health Information																									

Activities	Phase I			Phase II									Phase III											
Month*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
iv. Services to Physicians																									
Clinical Guidelines and Pathways (QI Site)																									
Essential Drug Policy																									
v. Services to Hospitals and Community Health Care Organizations																									
Facility Licensing Programs, Special QI Programs, etc (QI Site)																									
Providing Collaboration Tools																									
Free (or reduced cost) E-mail Service																									
Online Discussion Forums																									
Chat Rooms on Specific Topics																									
Platform for Organizing and Running Virtual Conferences																									
Teleconferencing																									
Workflow Software																									
Conducting Surveys and Polls																									
Online Collection of Routine Data																									
vi. Services within the Central Ministry																									
Online Placement of Key Documents																									
Policy and Procedural Manuals for Clinical and Administrative Departments																									
Operations Manuals																									
Searchable Phonebooks																									
Training Material																									
Calendar of Events for Speakers Training and Other Activities																									
Electronic Forms																									
Internal E-mail																									
Internet E-Mail Access																									
Ministry EIS																									
Governorate-level Data Entry																									
vii. Current Events and News																									
Upcoming Health Events																									
Egyptian																									
International																									

Activities	Phase I			Phase II									Phase III											
Month*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Health in the News																									
Job Openings at MOHP																									
Listing of Jobs																									
How to Apply																									
viii. Research/Education Tools																									
Libraries																									
Egyptian																									
International																									
Online Health Journals																									
Online Databases																									
Medical Dictionaries (e.g., Medline)																									
All Aspects Will Continue to Be Developed Through Phase III																									
Links to Universities and Programs with Health care-related…																									
Distance Learning Courses																									
Continuing Medical Education Courses																									
Careers in Health care and the Ministry																									
ix. Links to Other Health care Related Websites																									
Egyptian Organizations																									
International Links																									
Selected International and Regional Institutions Working on Health Reform																									
Selected Electronic Clearinghouses, Networks and Listservs																									
Links to US Institutions																									
Other International Health care Reform Sites																									
Selected USAID-funded Projects Collaborating on Health Sector Reform.																									
Middle East Sites																									
x. Links to Ongoing Ministerial Projects																									
xi. Links to Internet Resources																									
Basics of Internet																									

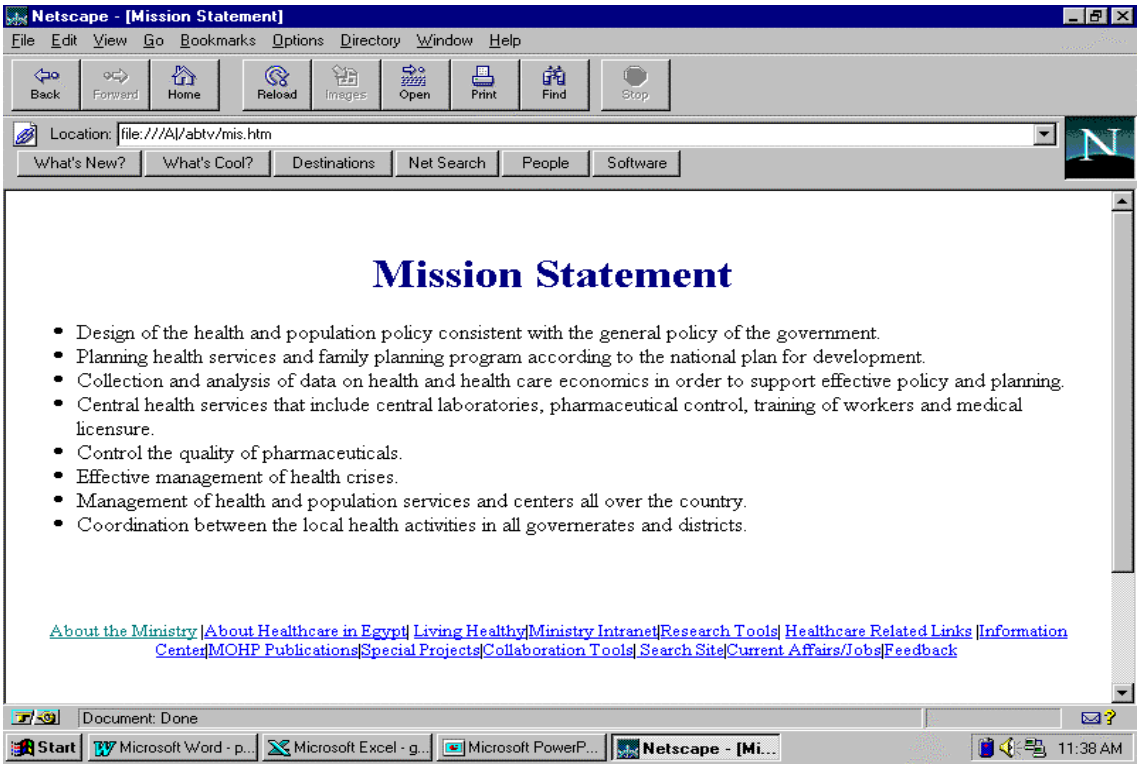
Activities	Phase I			Phase II									Phase III											
Month*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
How to get Free E-mail and Access to the WWW																									
xii. Feedback																									
Response to Surveys on Specific Topics																									
Questions and Complaints																									
General Feedback on Website																									

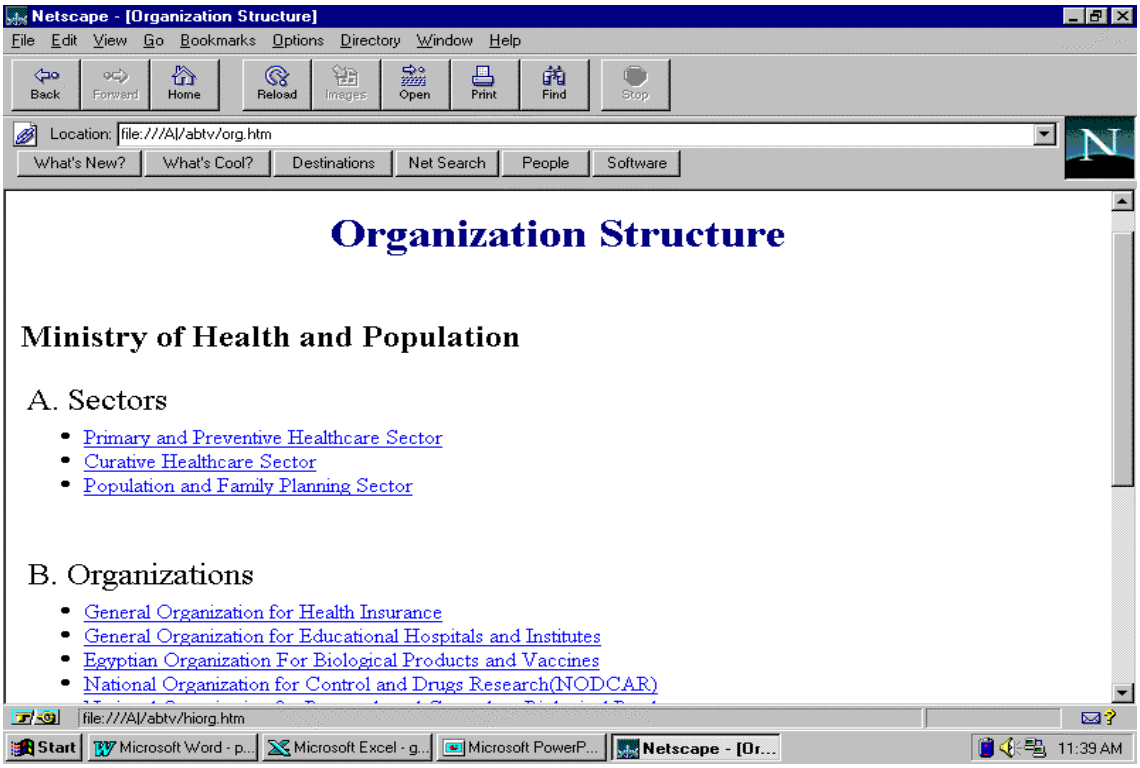
* All aspects will continue to be developed through Phase III.

Annex B: Screen Shots of the Website as of June 4, 1998

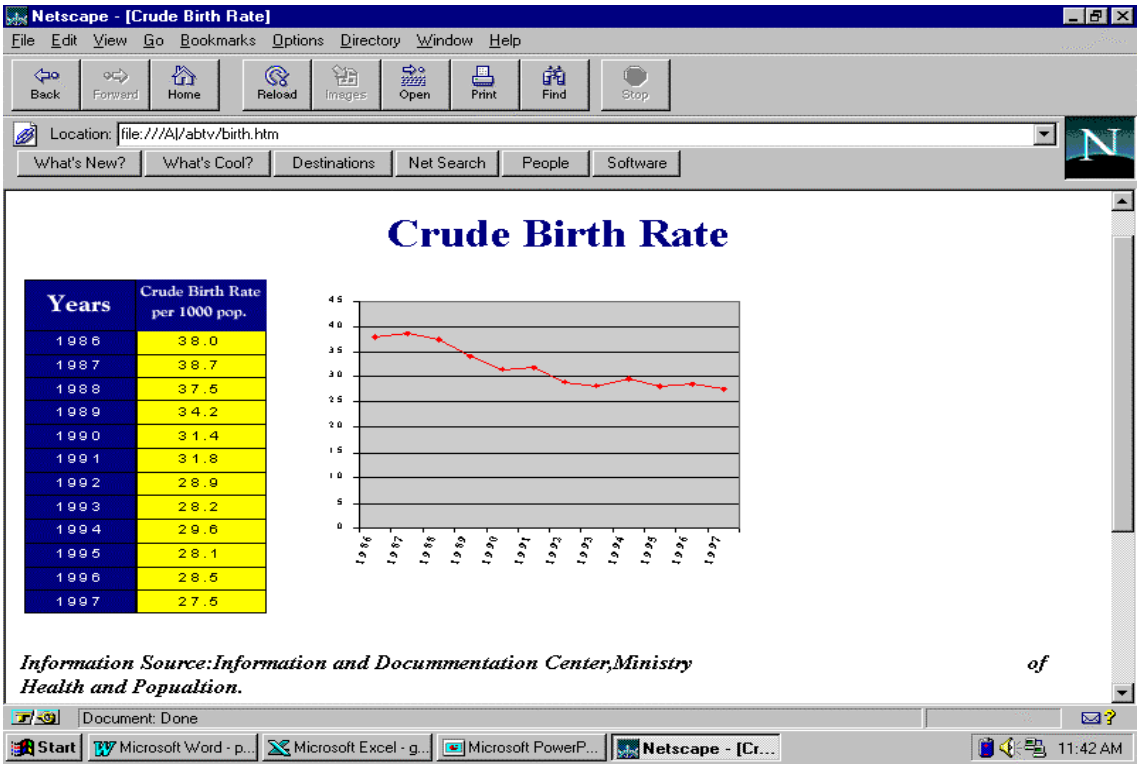
Netscape - [Ministry of Health Home page "Title Screen"]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/index.htm
What's New? What's Cool? Destinations Net Search People Software
Population Web-Site
This Month's Featured Topic
About the Ministry
About Healthcare in Egypt
Living Healthy
MOHP Publications
Special Projects
Ministry Intranet
Healthcare Related Links
Research Tools
Collaboration Tools
Quality Improvment Initative
Current Events/Employment
Give us Feedback
Site Map
Search Site
Back
Next
MAIL
Document: Done
Start
Microsoft Word - c...
Microsoft Excel - g...
Microsoft PowerPoi...
Netscape - [Mi...
Connecting to egy...
11:34 AM

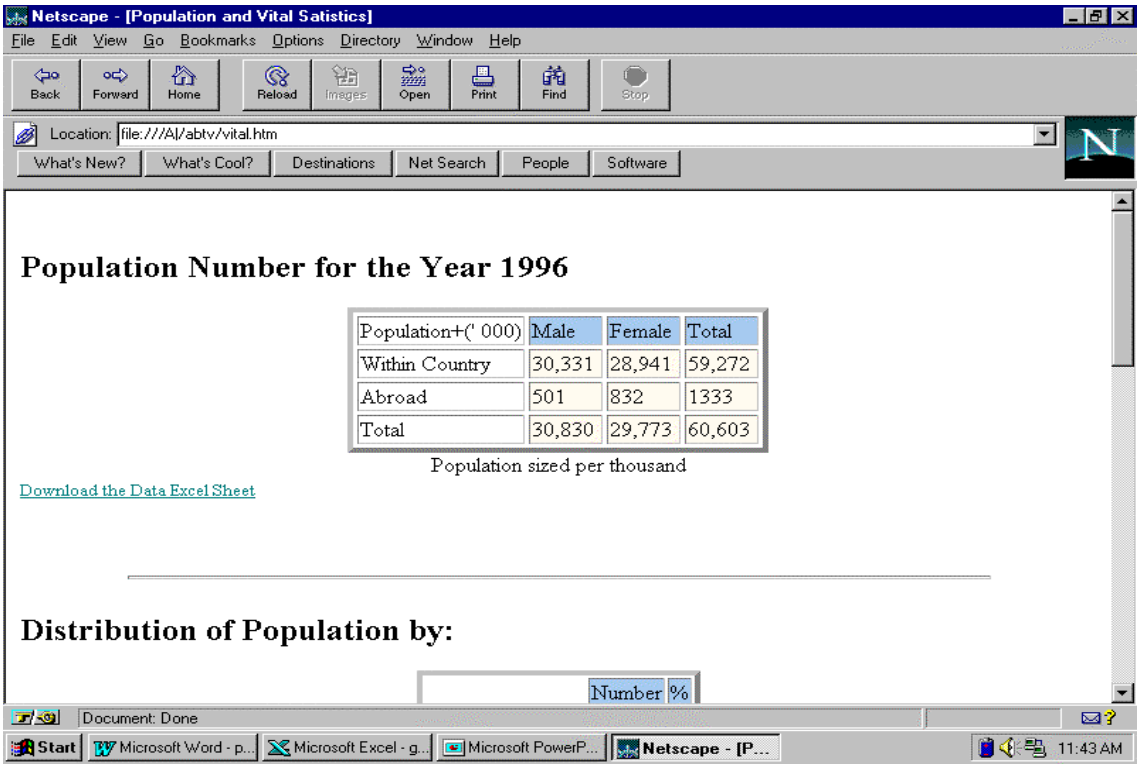
Netscape - [About the Ministry]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/about.htm
What's New? What's Cool? Destinations Net Search People Software
About The Ministry
The Ministry of Health and Population was established in April, 1936. The goal of the Ministry is to build a fit and healthy nation. To achieve this goal, we are working toward a truly responsive, comprehensive and integrated health system based upon scientific principles.The ministry is responsible for providing local and national preventive, curative and rehabilitative health services, family planning and environmental health services. The ministry is responsible for maintaining these services at the highest quality and at affordable levels for all the Egyptian citizens.
Mission Statement
Organizational Structure
Ministry Achievements
Historical Highlights
Document: Done
Start
Microsoft Word - p...
Microsoft Excel - g...
Microsoft PowerP...
Netscape - [A...
11:37 AM

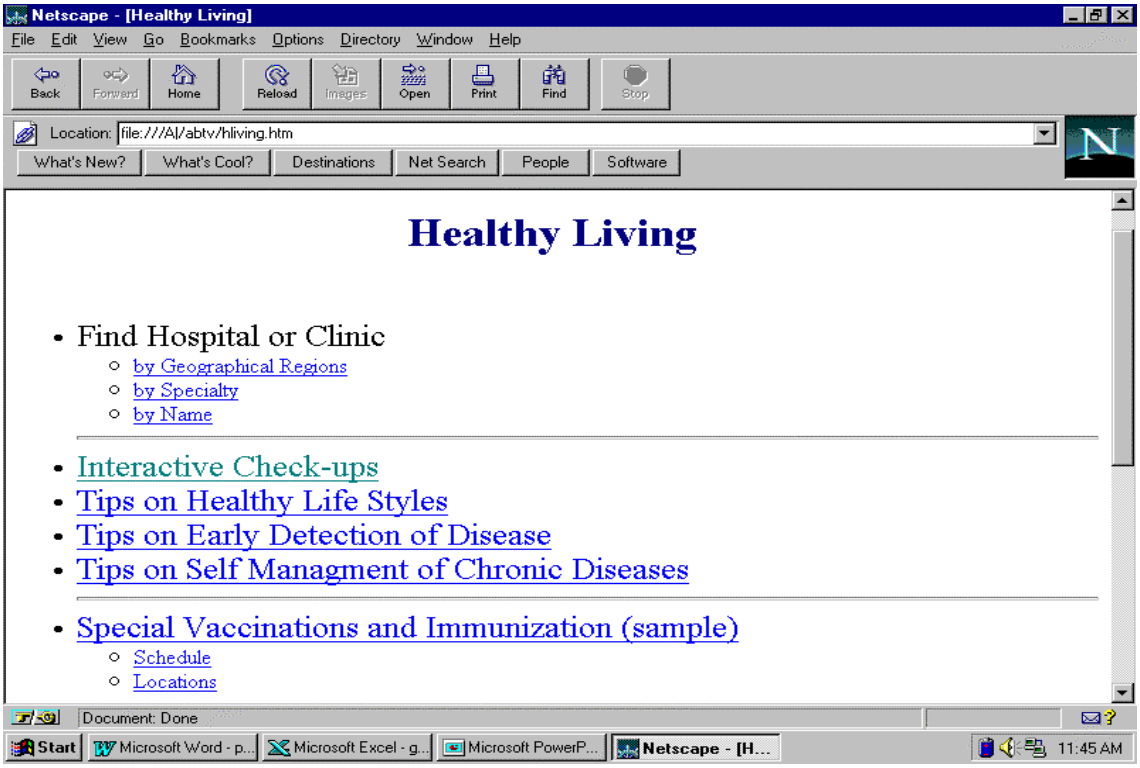

Netscape - [Mission Statement]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/mis.htm
What's New? What's Cool? Destinations Net Search People Software
Mission Statement
Design of the health and population policy consistent with the general policy of the government.
Planning health services and family planning program according to the national plan for development.
Collection and analysis of data on health and health care economics in order to support effective policy and planning.
Central health services that include central laboratories, pharmaceutical control, training of workers and medical licensure.
Control the quality of pharmaceuticals.
Effective management of health crises.
Management of health and population services and centers all over the country.
Coordination between the local health activities in all governerates and districts.
About the Ministry |About Healthcare in Egypt| Living Healthy|Ministry Intranet|Research Tools| Healthcare Related Links |Information Center|MOHP Publications|Special Projects|Collaboration Tools| Search Site|Current Affairs/Jobs|Feedback
Document: Done
Start Microsoft Word - p... Microsoft Excel - g... Microsoft PowerP... Netscape - [Mi... 11:38 AM


Netscape - [Organization Structure]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/org.htm
What's New? What's Cool? Destinations Net Search People Software
Organization Structure
Ministry of Health and Population
A. Sectors
Primary and Preventive Healthcare Sector
Curative Healthcare Sector
Population and Family Planning Sector
B. Organizations
General Organization for Health Insurance
General Organization for Educational Hospitals and Institutes
Egyptian Organization For Biological Products and Vaccines
National Organization for Control and Drugs Research(NODCAR)
file:///A|/abtv/hiorg.htm
Start Microsoft Word - p... Microsoft Excel - g... Microsoft PowerP... Netscape - [Or... 11:39 AM

Netscape - [About Healthcare in Egypt]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/abouthc.htm
What's New? What's Cool? Destinations Net Search People Software
About Healthcare in Egypt
Basic Healthcare Statistics
Information on Specific Health and Population Issues
About the Ministry | About Healthcare in Egypt | Living Healthy|Ministry Intranet|Research Tools| Healthcare Related Links |Information Center|MOHP Publications|Special Projects|Collaboration Tools| Search Site|Current Affairs/Jobs|Feedback
Home
Document: Done
Start Microsoft Word - p... Microsoft Excel - g... Microsoft PowerP... Netscape - [A... 11:40 AM


Netscape - [Crude Birth Rate]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/birth.htm
What's New? What's Cool? Destinations Net Search People Software
Crude Birth Rate
Years
Crude Birth Rate per 1000 pop.
1986 38.0
1987 38.7
1988 37.5
1989 34.2
1990 31.4
1991 31.8
1992 28.9
1993 28.2
1994 29.6
1995 28.1
1996 28.5
1997 27.5
45 40 35 30 25 20 15 10 5 0
1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997
Information Source:Information and Documentation Center,Ministry of Health and Population.
Document: Done
Start Microsoft Word - p... Microsoft Excel - g... Microsoft PowerP... Netscape - [Cr... 11:42 AM


Netscape - [Population and Vital Satistics]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/vital.htm
What's New? What's Cool? Destinations Net Search People Software
Population Number for the Year 1996
Population+(' 000) Male Female Total
Within Country 30,331 28,941 59,272
Abroad 501 832 1333
Total 30,830 29,773 60,603
Population sized per thousand
Download the Data Excel Sheet
Distribution of Population by:
Number %
Document: Done
Start Microsoft Word - p... Microsoft Excel - g... Microsoft PowerP... Netscape - [P...
11:43 AM


Netscape - [Healthy Living]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/hliving.htm
What's New? What's Cool? Destinations Net Search People Software
Healthy Living
Find Hospital or Clinic
by Geographical Regions
by Specialty
by Name
Interactive Check-ups
Tips on Healthy Life Styles
Tips on Early Detection of Disease
Tips on Self Managment of Chronic Diseases
Special Vaccinations and Immunization (sample)
Schedule
Locations
Document: Done
Start Microsoft Word - p... Microsoft Excel - g... Microsoft PowerP... Netscape - [H...
11:45 AM

Netscape - [Current Affairs/Jobs]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/affairs.htm
What's New? What's Cool? Destinations Net Search People Software
Current Affairs/Jobs
Upcoming Health Events
Egyptian
International
1. AFTH International Summit on Healthcare Technology: Vision 2020
Health in the News
Endostatin, Newly Discovered Angiogenic Inhibitor Licensed
Job Openings at MOHP
Listing of Jobs
How to Apply
About the Ministry |About Healthcare in Egypt| Living Healthy|Ministry Intranet|Research Tools| Healthcare Related Links |Information
Document: Done
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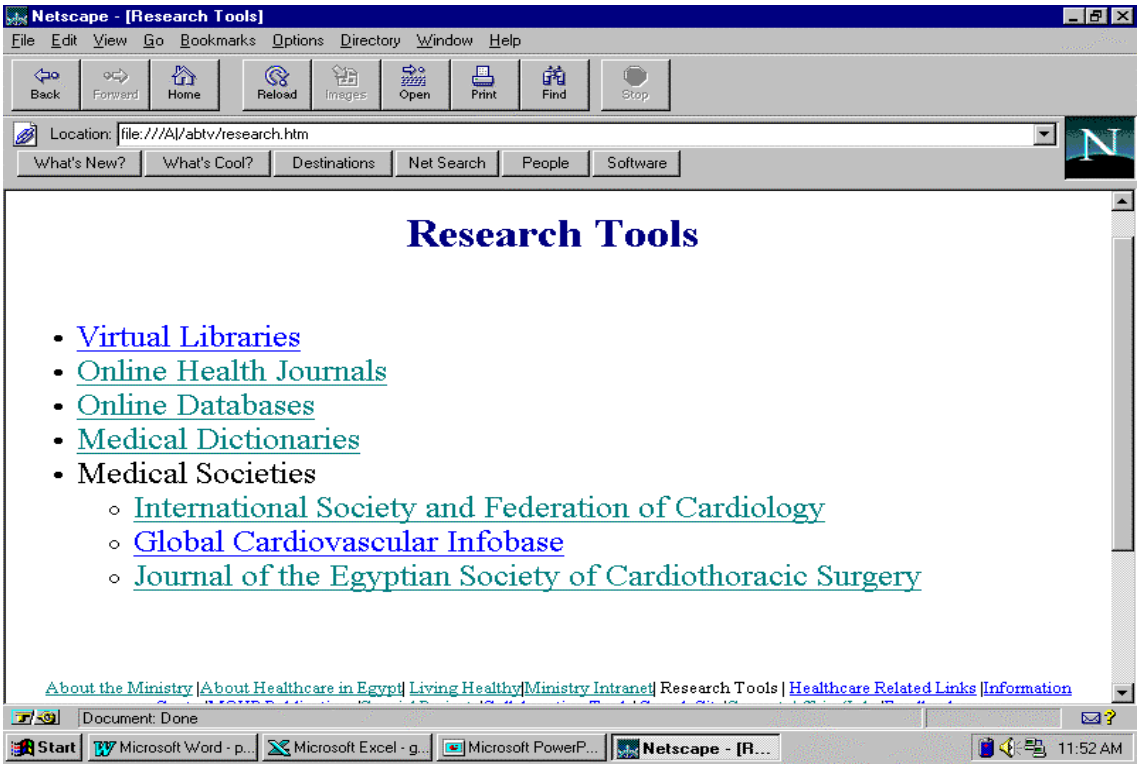
Microsoft Word - p...
Microsoft Excel - g...
Microsoft PowerP...
Netscape - [C...
11:49 AM


Netscape - [Research Tools]
File Edit View Go Bookmarks Options Directory Window Help
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Location: file:///A|/abtv/research.htm
What's New? What's Cool? Destinations Net Search People Software
Research Tools
Virtual Libraries
Online Health Journals
Online Databases
Medical Dictionaries
Medical Societies
International Society and Federation of Cardiology
Global Cardiovascular Infobase
Journal of the Egyptian Society of Cardiothoracic Surgery
About the Ministry |About Healthcare in Egypt| Living Healthy|Ministry Intranet| Research Tools | Healthcare Related Links |Information
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Microsoft Word - p...
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Microsoft PowerP...
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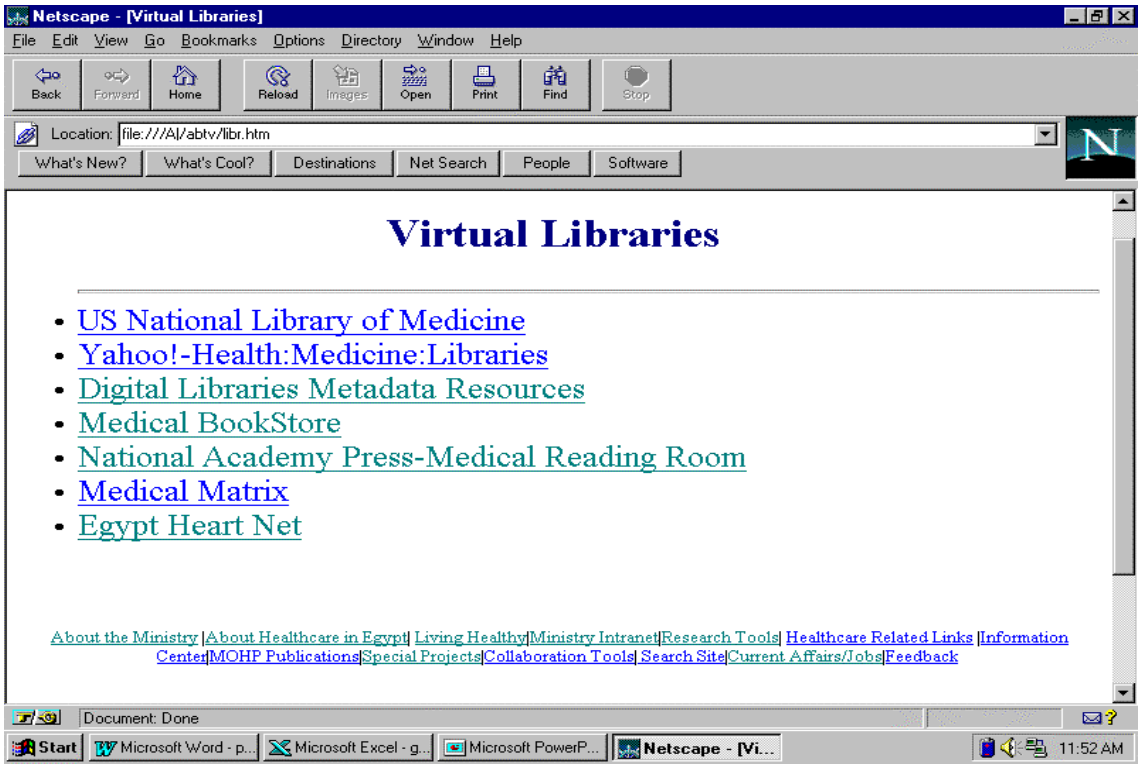
11:52 AM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Back Forward Home Reload Images Open Print Find Stop
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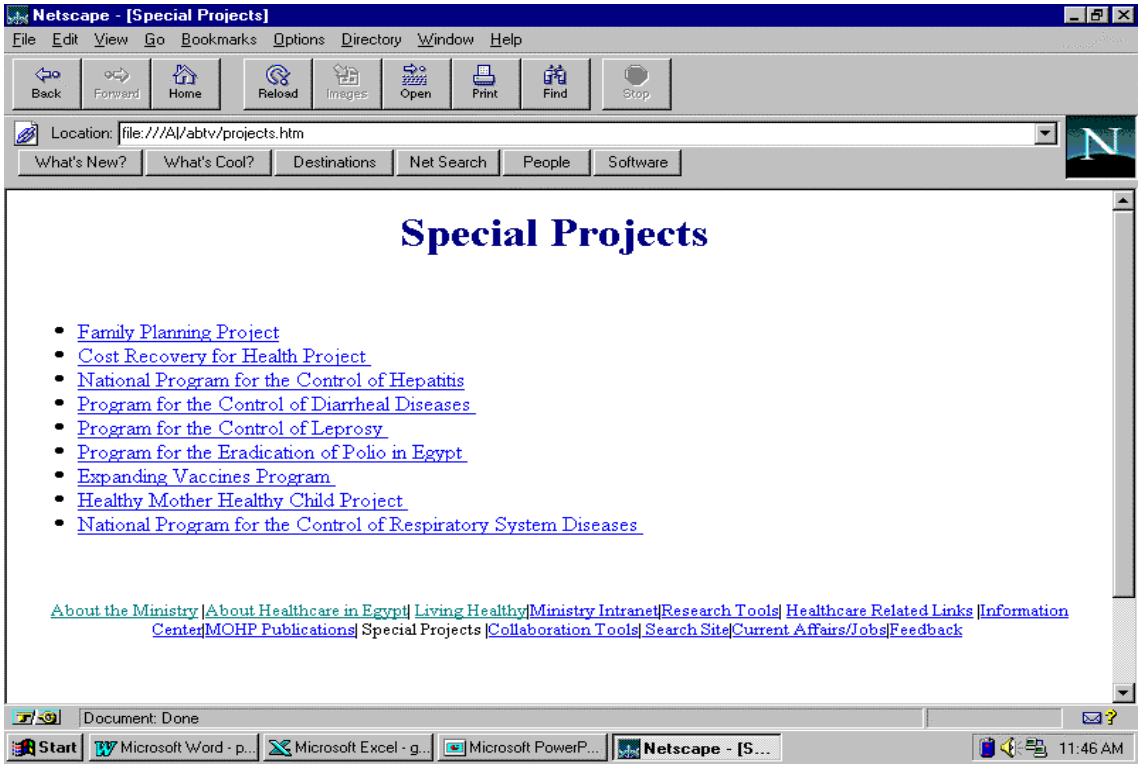
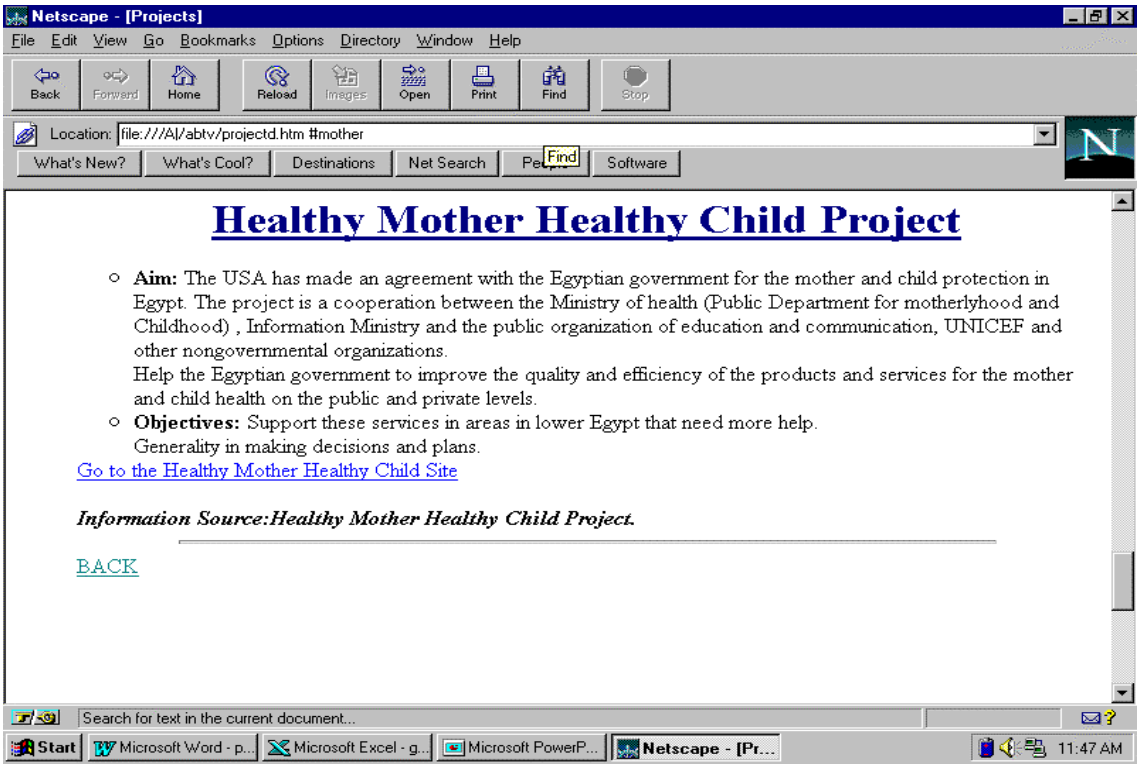
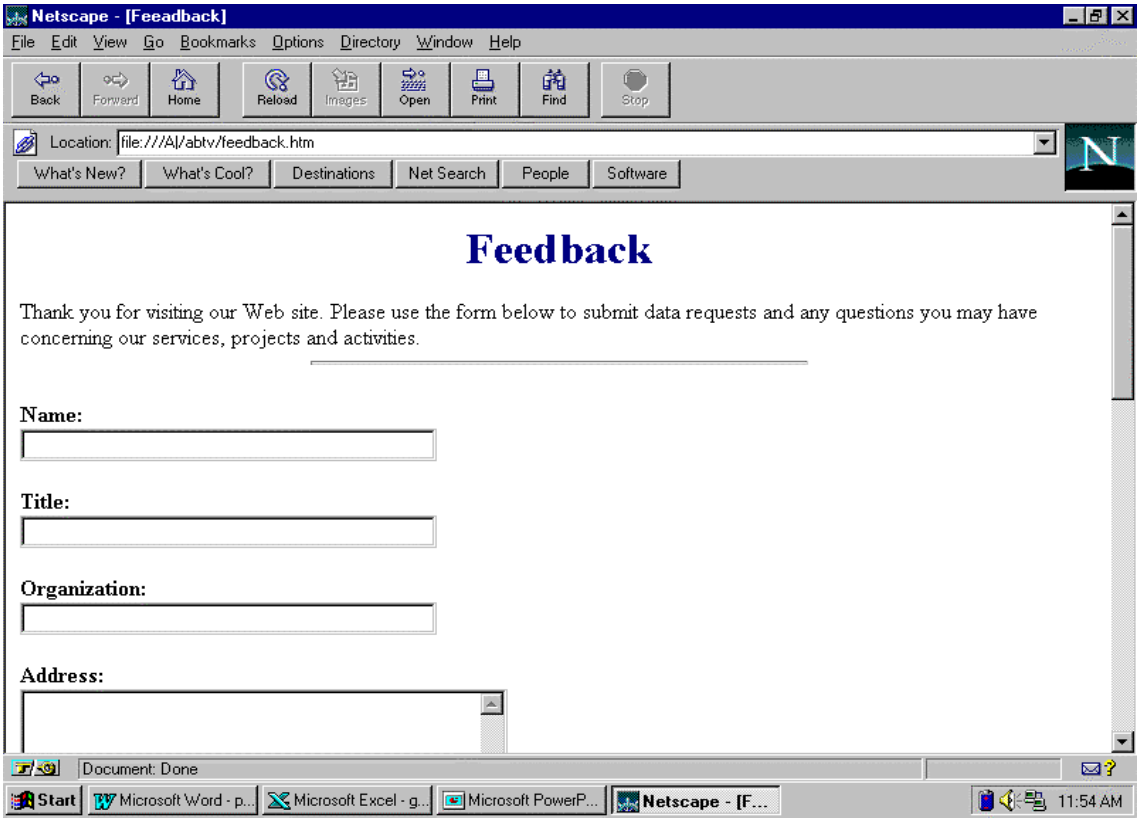
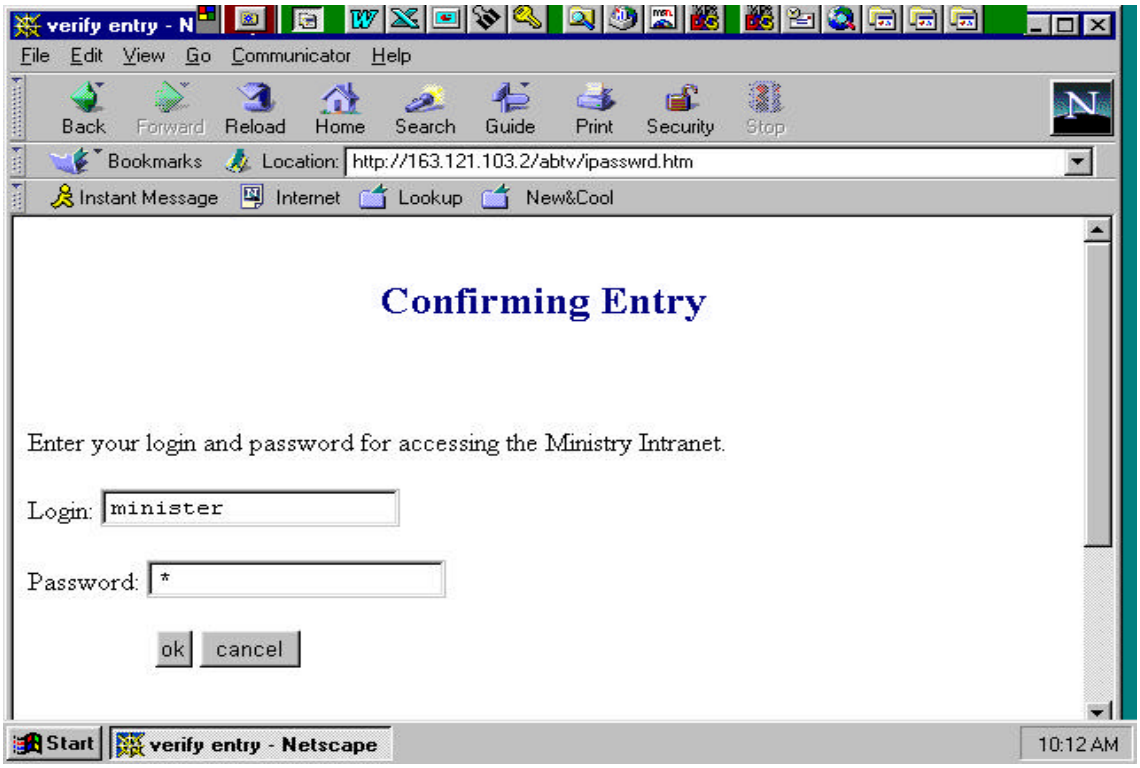
What's New? What's Cool? Destinations Net Search People Software
Virtual Libraries
US National Library of Medicine
Yahoo!-Health:Medicine:Libraries
Digital Libraries Metadata Resources
Medical BookStore
National Academy Press-Medical Reading Room
Medical Matrix
Egypt Heart Net
About the Ministry | About Healthcare in Egypt | Living Healthy | Ministry Intranet | Research Tools | Healthcare Related Links | Information Center | MOHP Publications | Special Projects | Collaboration Tools | Search Site | Current Affairs/Jobs | Feedback
Document: Done
Start Microsoft Word - p... Microsoft Excel - g... Microsoft PowerP... Netscape - [Vi... 11:52 AM


Netscape - [Special Projects]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/projects.htm
What's New? What's Cool? Destinations Net Search People Software
Special Projects
Family Planning Project
Cost Recovery for Health Project
National Program for the Control of Hepatitis
Program for the Control of Diarrheal Diseases
Program for the Control of Leprosy
Program for the Eradication of Polio in Egypt
Expanding Vaccines Program
Healthy Mother Healthy Child Project
National Program for the Control of Respiratory System Diseases
About the Ministry | About Healthcare in Egypt | Living Healthy | Ministry Intranet | Research Tools | Healthcare Related Links | Information Center | MOHP Publications | Special Projects | Collaboration Tools | Search Site | Current Affairs/Jobs | Feedback
Document: Done
Start Microsoft Word - p... Microsoft Excel - g... Microsoft PowerP... Netscape - [S... 11:46 AM


Netscape - [Projects]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/projectd.htm #mother
What's New? What's Cool? Destinations Net Search Find Software
Healthy Mother Healthy Child Project
Aim: The USA has made an agreement with the Egyptian government for the mother and child protection in Egypt. The project is a cooperation between the Ministry of health (Public Department for motherlyhood and Childhood) , Information Ministry and the public organization of education and communication, UNICEF and other nongovernmental organizations.
Help the Egyptian government to improve the quality and efficiency of the products and services for the mother and child health on the public and private levels.
Objectives: Support these services in areas in lower Egypt that need more help.
Generality in making decisions and plans.
Go to the Healthy Mother Healthy Child Site
Information Source:Healthy Mother Healthy Child Project.
BACK
Search for text in the current document...
Start Microsoft Word - p... Microsoft Excel - g... Microsoft PowerP... Netscape - [Pr... 11:47 AM


Netscape - [Feeadback]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: file:///A|/abtv/feedback.htm
What's New? What's Cool? Destinations Net Search People Software
Feedback
Thank you for visiting our Web site. Please use the form below to submit data requests and any questions you may have concerning our services, projects and activities.
Name:
Title:
Organization:
Address:
Document: Done
Start Microsoft Word - p... Microsoft Excel - g... Microsoft PowerP... Netscape - [F... 11:54 AM


verify entry - N
File Edit View Go Communicator Help
Back Forward Reload Home Search Guide Print Security Stop
Bookmarks Location: http://163.121.103.2/abtv/ipasswrd.htm
Instant Message Internet Lookup New&Cool
Confirming Entry
Enter your login and password for accessing the Ministry Intranet.
Login: minister
Password: *
ok cancel
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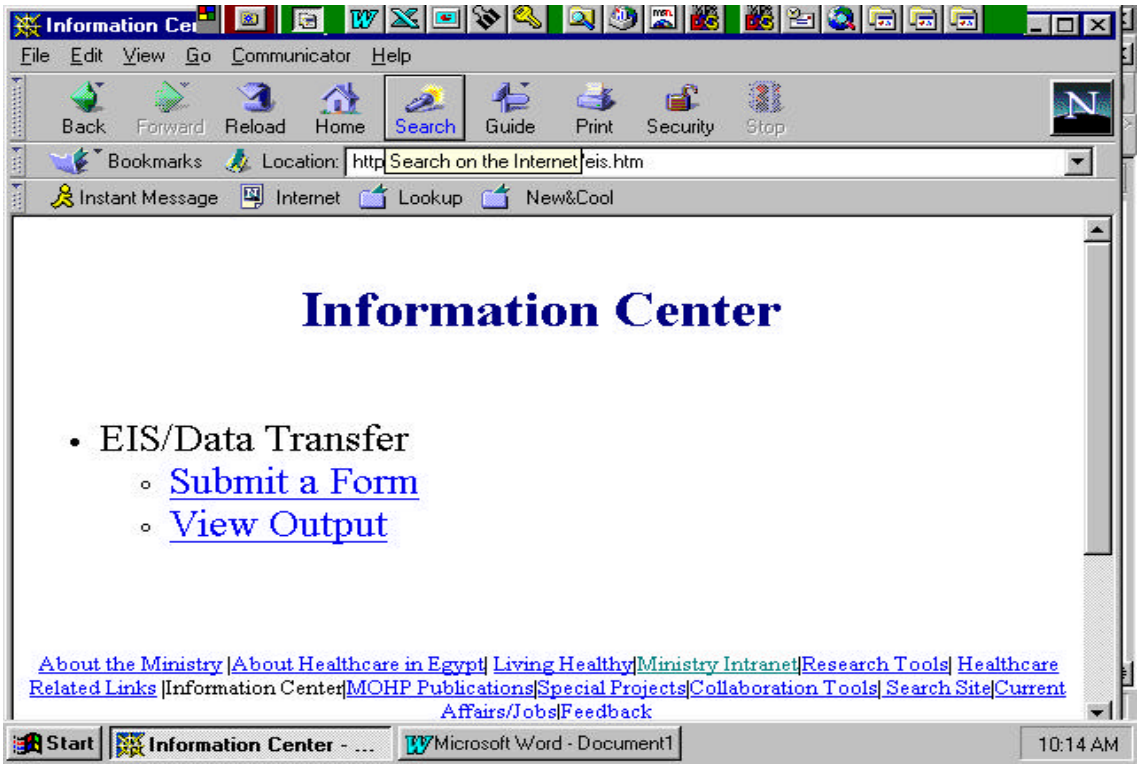
Information Cer
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Information Center
EIS/Data Transfer
Submit a Form
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About the Ministry | About Healthcare in Egypt | Living Healthy | Ministry Intranet | Research Tools | Healthcare Related Links | Information Center | MOHP Publications | Special Projects | Collaboration Tools | Search Site | Current Affairs/Jobs | Feedback
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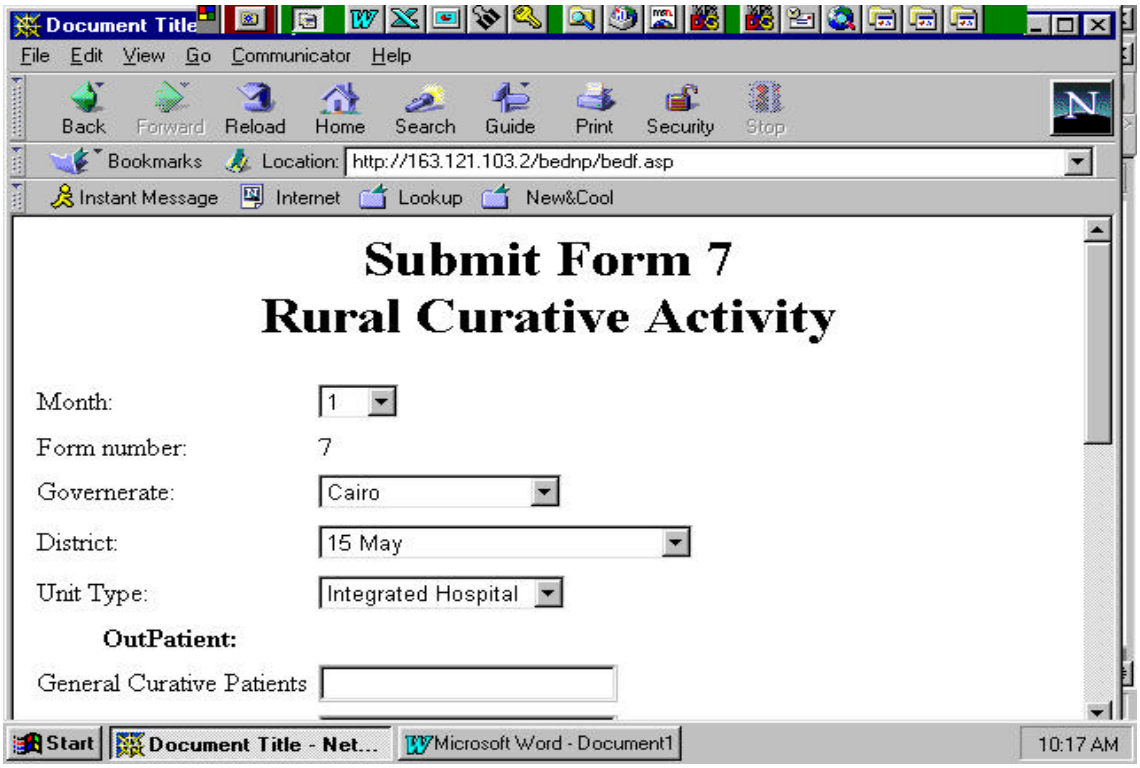

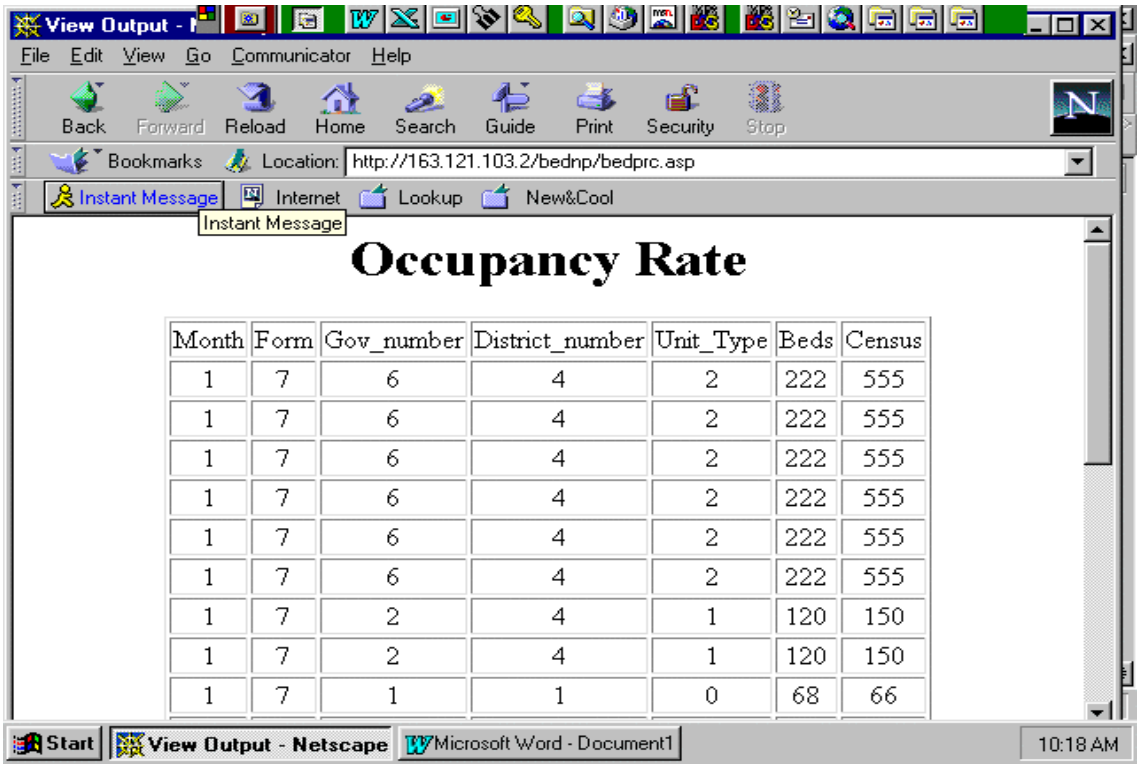

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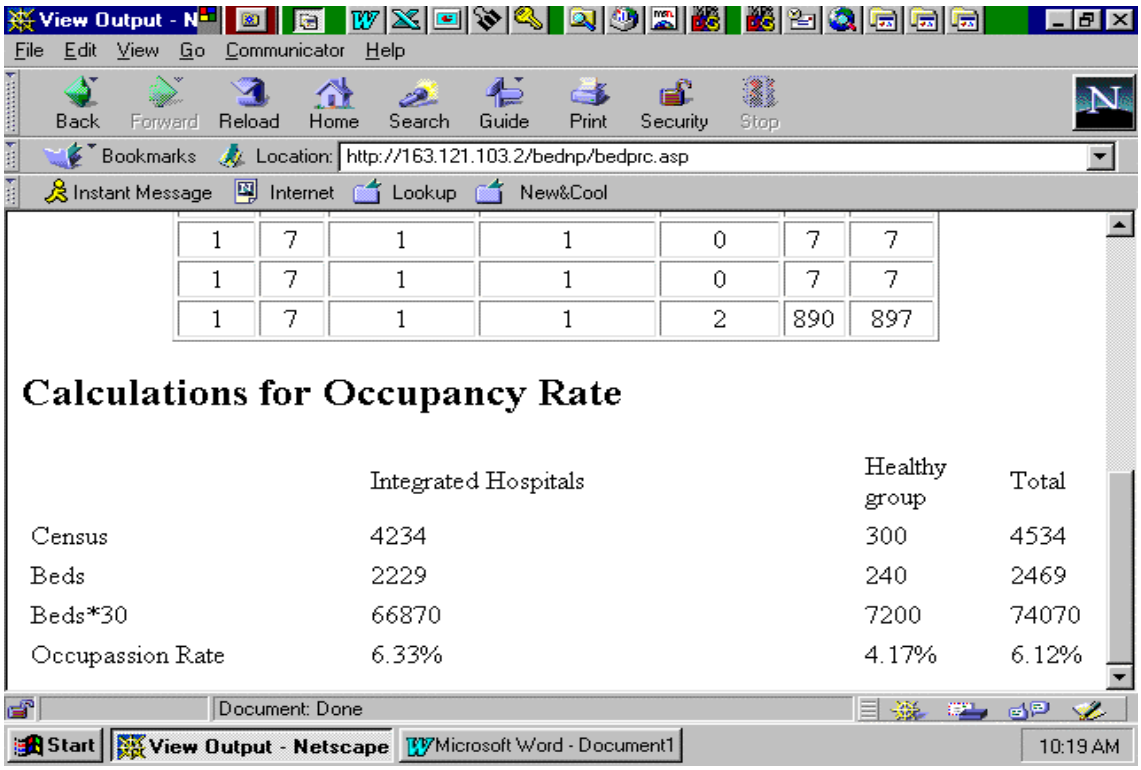
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1 7 1 1 0 7 7
1 7 1 1 0 7 7
1 7 1 1 2 890 897
Calculations for Occupancy Rate
Integrated Hospitals
Healthy group
Total
Census 4234 300 4534
Beds 2229 240 2469
Beds*30 66870 7200 74070
Occupassion Rate 6.33% 4.17% 6.12%
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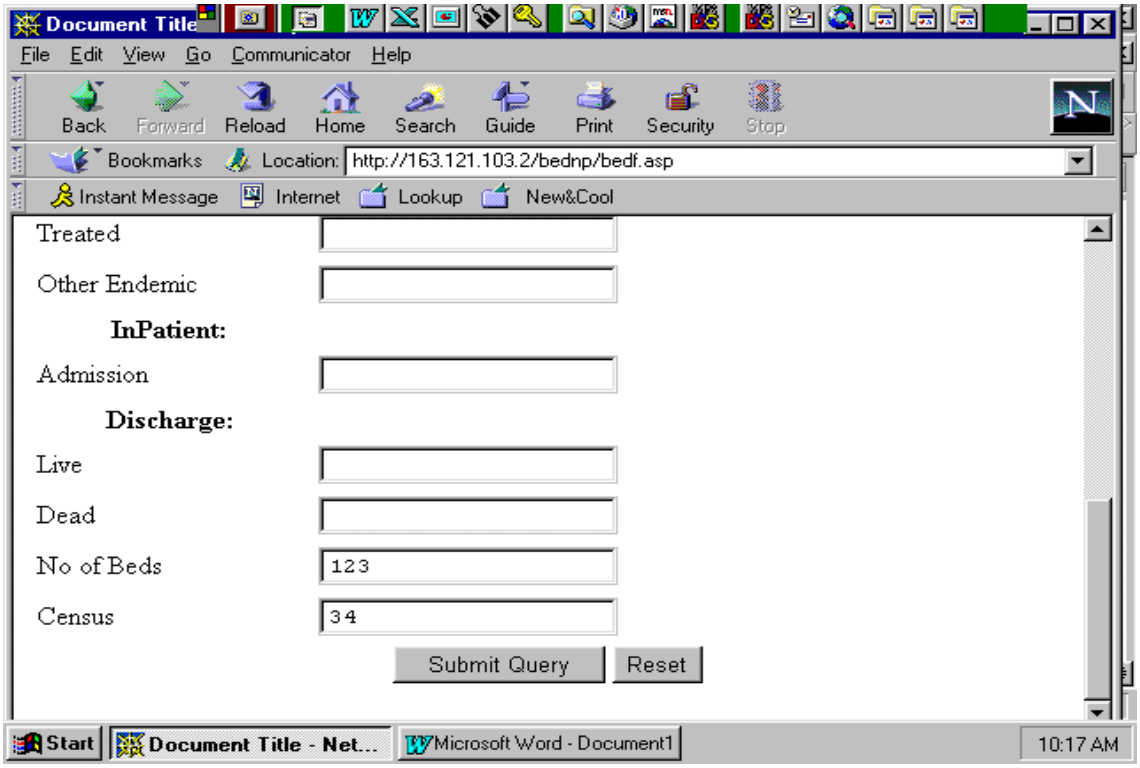
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Treated
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Health Care facilities
Drugs
Doctors
Health Projects
Text by Keyword
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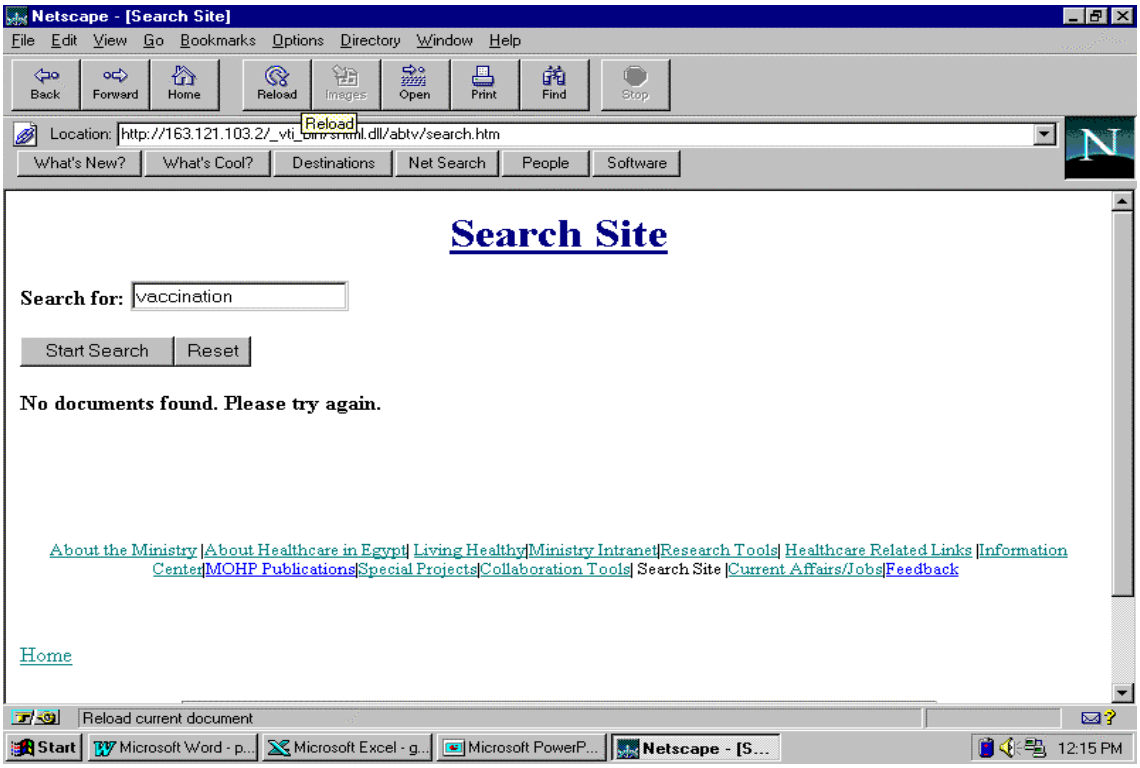
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What's New? What's Cool? Destinations Net Search People Software
Search Site
Search for: vaccination
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Home
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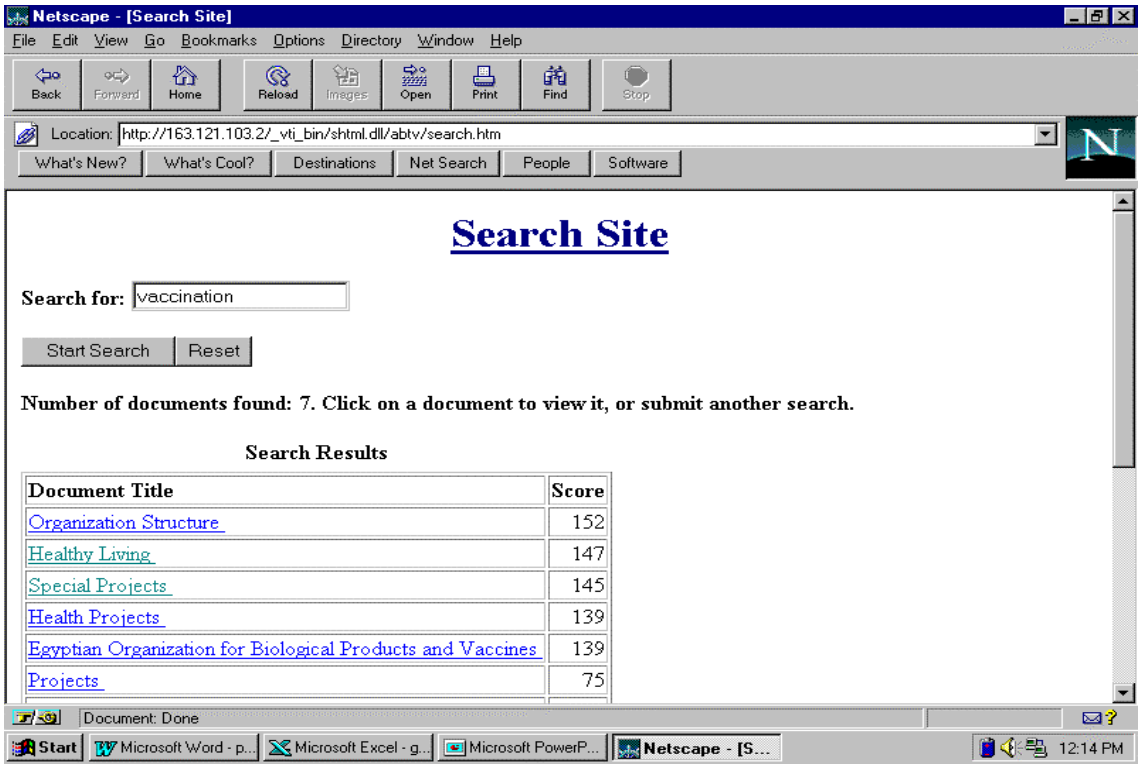
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What's New? What's Cool? Destinations Net Search People Software
Search Site
Search for: vaccination
Start Search Reset
Number of documents found: 7. Click on a document to view it, or submit another search.
Search Results
Document Title
Score
Organization Structure 152
Healthy Living 147
Special Projects 145
Health Projects 139
Egyptian Organization for Biological Products and Vaccines 139
Projects 75
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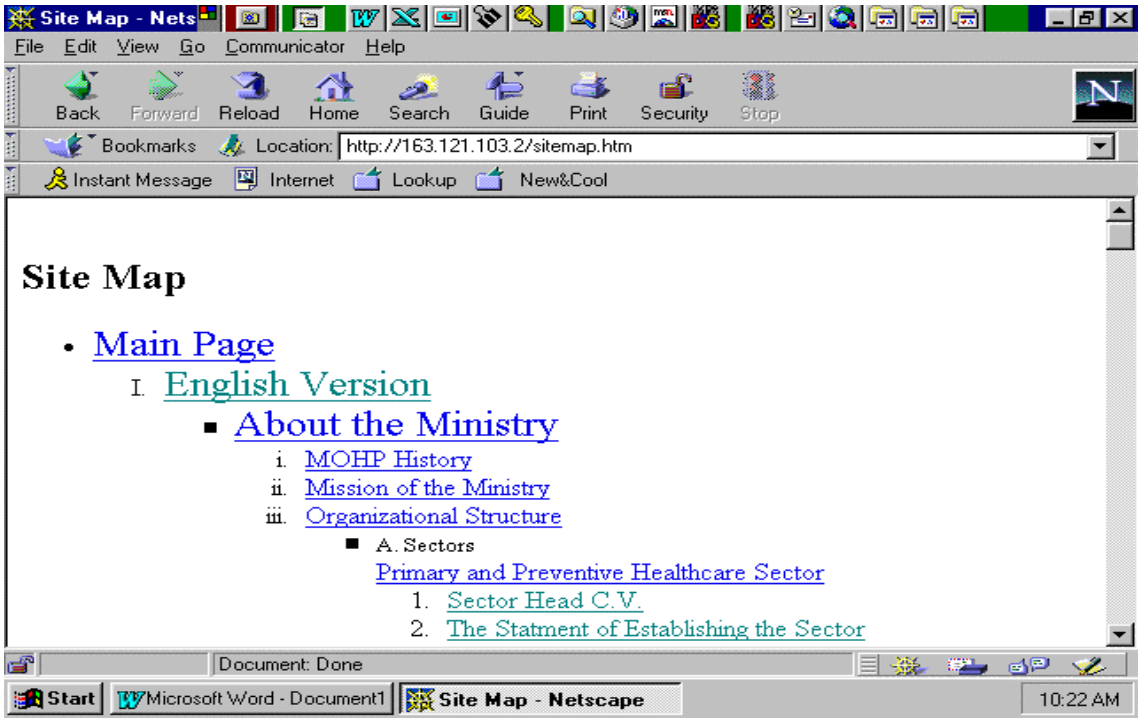
Site Map - Nets
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Bookmarks Location: http://163.121.103.2/sitemap.htm
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Site Map
Main Page
I. English Version
About the Ministry
i. MOHP History
ii. Mission of the Ministry
iii. Organizational Structure
A. Sectors
Primary and Preventive Healthcare Sector
1. Sector Head C.V.
2. The Statment of Establishing the Sector
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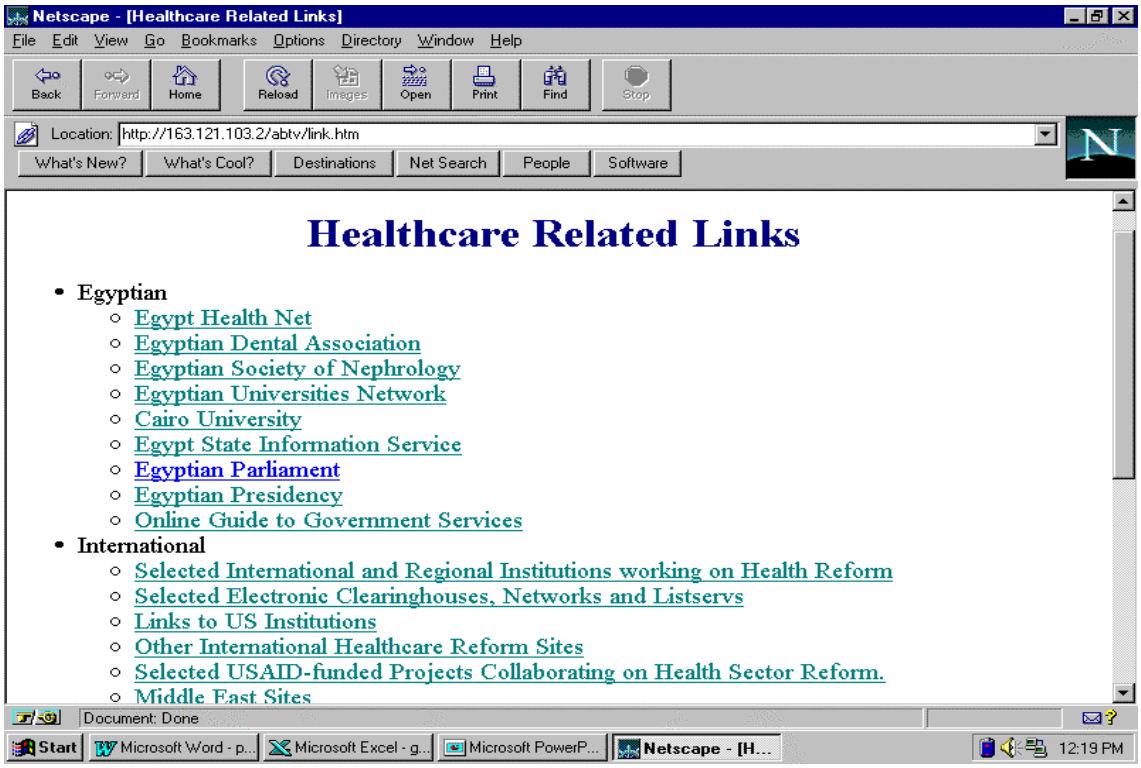
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What's New? What's Cool? Destinations Net Search People Software
Healthcare Related Links
Egyptian
Egypt Health Net
Egyptian Dental Association
Egyptian Society of Nephrology
Egyptian Universities Network
Cairo University
Egypt State Information Service
Egyptian Parliament
Egyptian Presidency
Online Guide to Government Services
International
Selected International and Regional Institutions working on Health Reform
Selected Electronic Clearinghouses, Networks and Listservs
Links to US Institutions
Other International Healthcare Reform Sites
Selected USAID-funded Projects Collaborating on Health Sector Reform.
Middle East Sites
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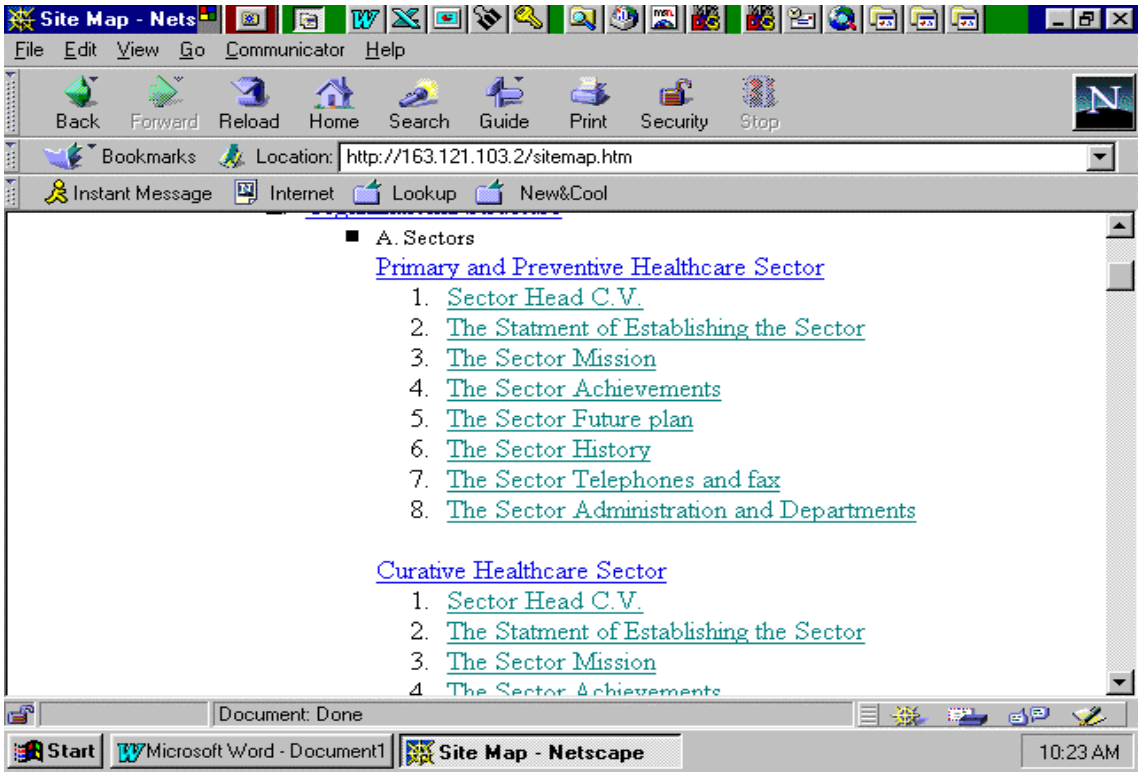
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A. Sectors
Primary and Preventive Healthcare Sector
1. Sector Head C.V.
2. The Statment of Establishing the Sector
3. The Sector Mission
4. The Sector Achievements
5. The Sector Future plan
6. The Sector History
7. The Sector Telephones and fax
8. The Sector Administration and Departments
Curative Healthcare Sector
1. Sector Head C.V.
2. The Statment of Establishing the Sector
3. The Sector Mission
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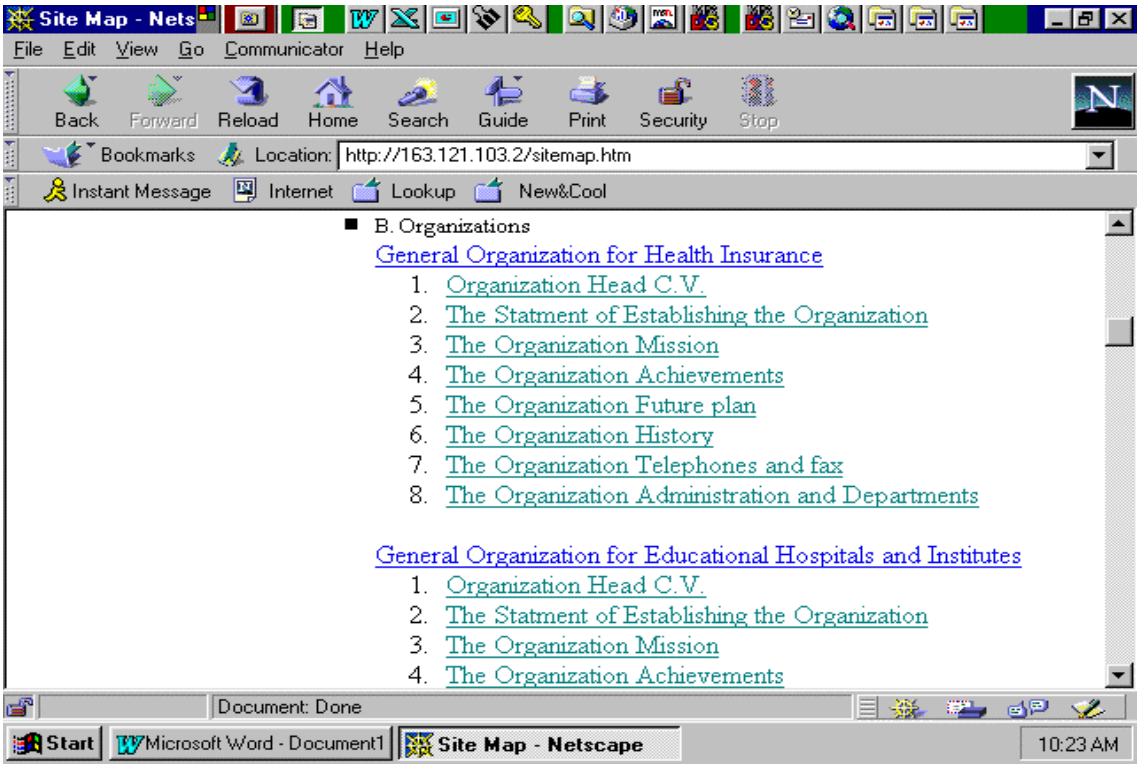
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B. Organizations
General Organization for Health Insurance
1. Organization Head C.V.
2. The Statment of Establishing the Organization
3. The Organization Mission
4. The Organization Achievements
5. The Organization Future plan
6. The Organization History
7. The Organization Telephones and fax
8. The Organization Administration and Departments
General Organization for Educational Hospitals and Institutes
1. Organization Head C.V.
2. The Statment of Establishing the Organization
3. The Organization Mission
4. The Organization Achievements
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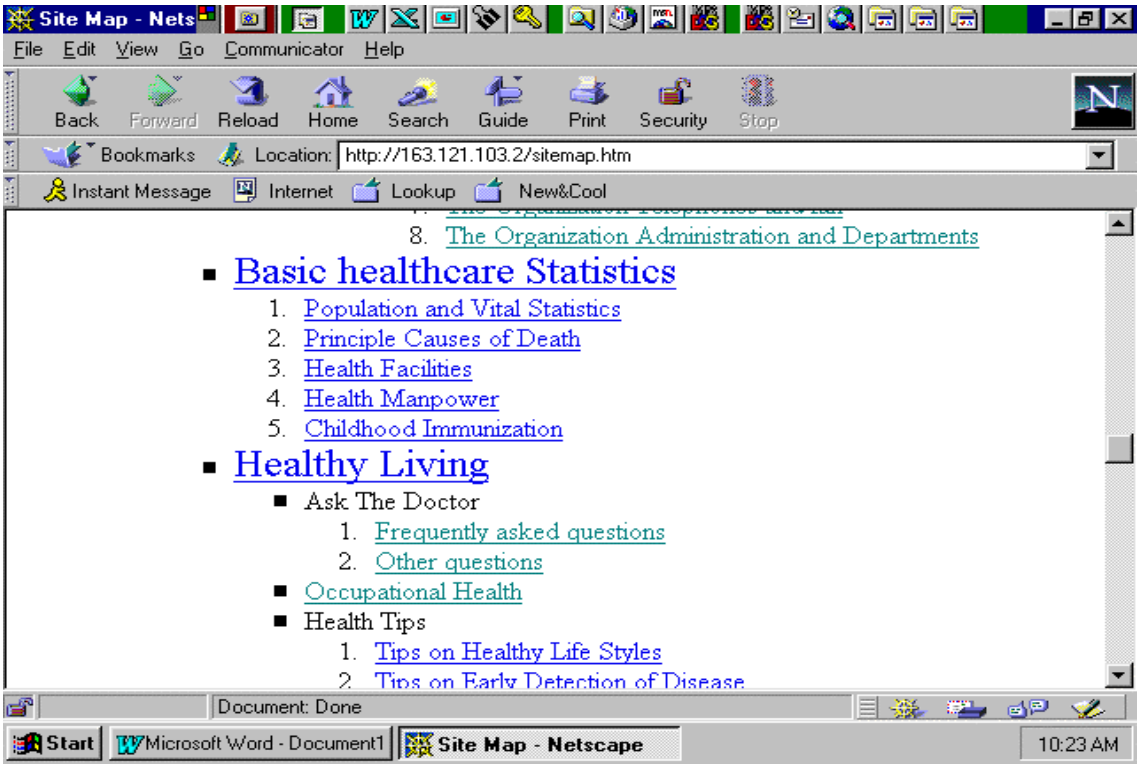
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8. The Organization Administration and Departments
Basic healthcare Statistics
1. Population and Vital Statistics
2. Principle Causes of Death
3. Health Facilities
4. Health Manpower
5. Childhood Immunization
Healthy Living
Ask The Doctor
1. Frequently asked questions
2. Other questions
Occupational Health
Health Tips
1. Tips on Healthy Life Styles
2. Tips on Early Detection of Disease
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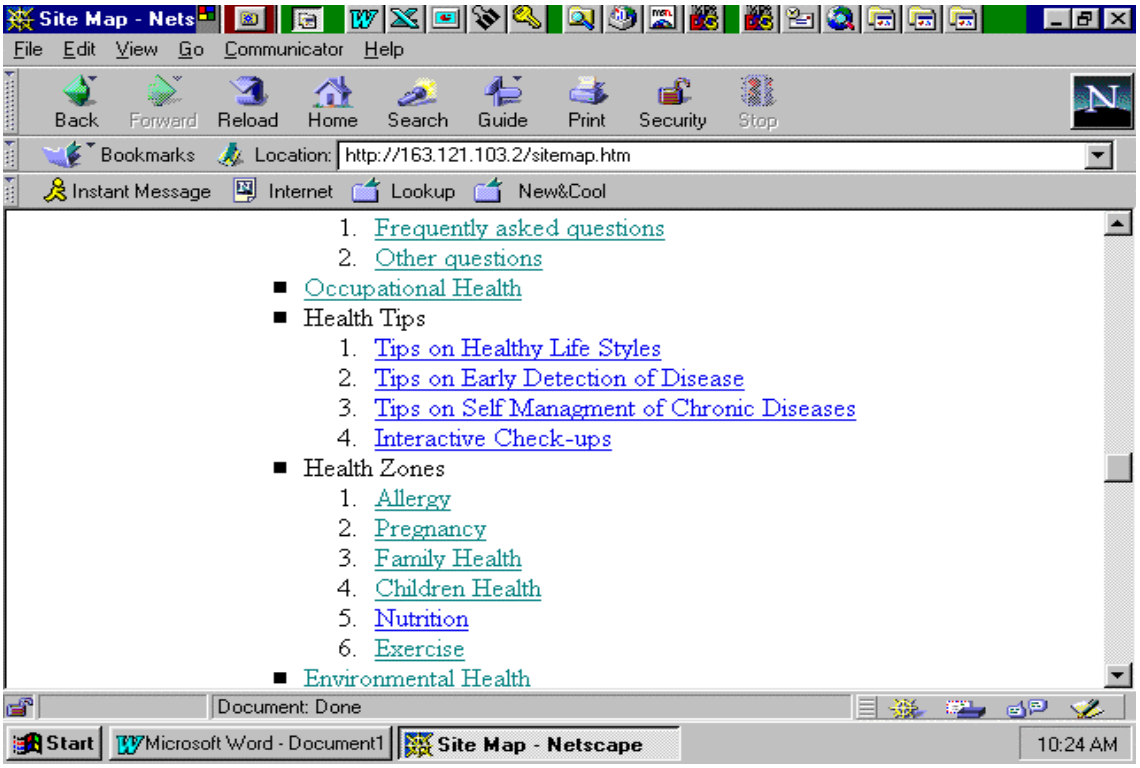
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1. Frequently asked questions
2. Other questions
Occupational Health
Health Tips
1. Tips on Healthy Life Styles
2. Tips on Early Detection of Disease
3. Tips on Self Managment of Chronic Diseases
4. Interactive Check-ups
Health Zones
1. Allergy
2. Pregnancy
3. Family Health
4. Children Health
5. Nutrition
6. Exercise
Environmental Health
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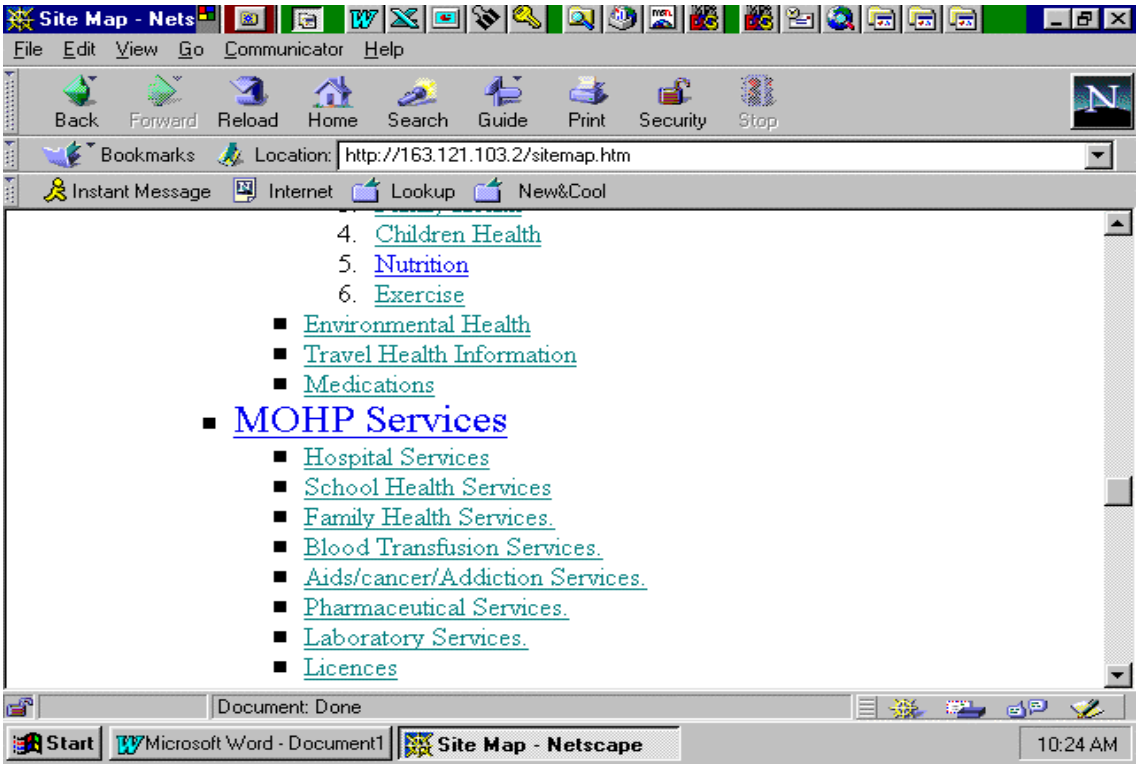
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4. Children Health
5. Nutrition
6. Exercise
Environmental Health
Travel Health Information
Medications
MOHP Services
Hospital Services
School Health Services
Family Health Services.
Blood Transfusion Services.
Aids/cancer/Addiction Services.
Pharmaceutical Services.
Laboratory Services.
Licences
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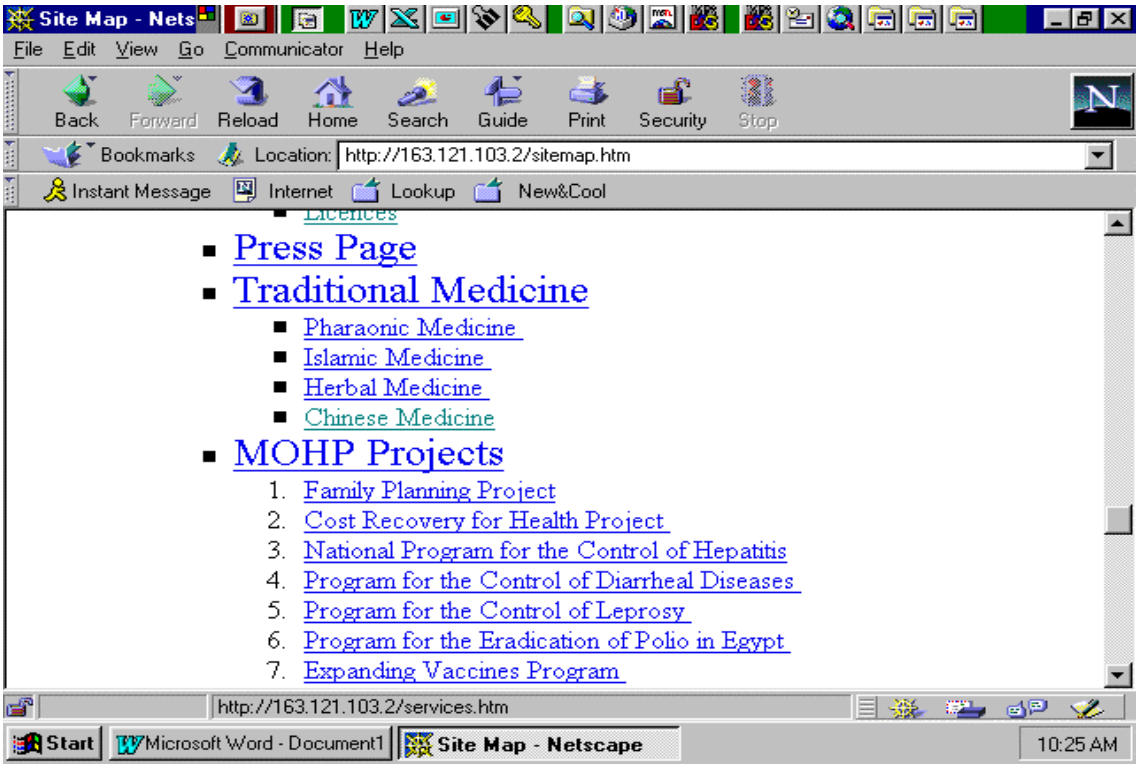
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Licences
Press Page
Traditional Medicine
Pharaonic Medicine
Islamic Medicine
Herbal Medicine
Chinese Medicine
MOHP Projects
1. Family Planning Project
2. Cost Recovery for Health Project
3. National Program for the Control of Hepatitis
4. Program for the Control of Diarrheal Diseases
5. Program for the Control of Leprosy
6. Program for the Eradication of Polio in Egypt
7. Expanding Vaccines Program
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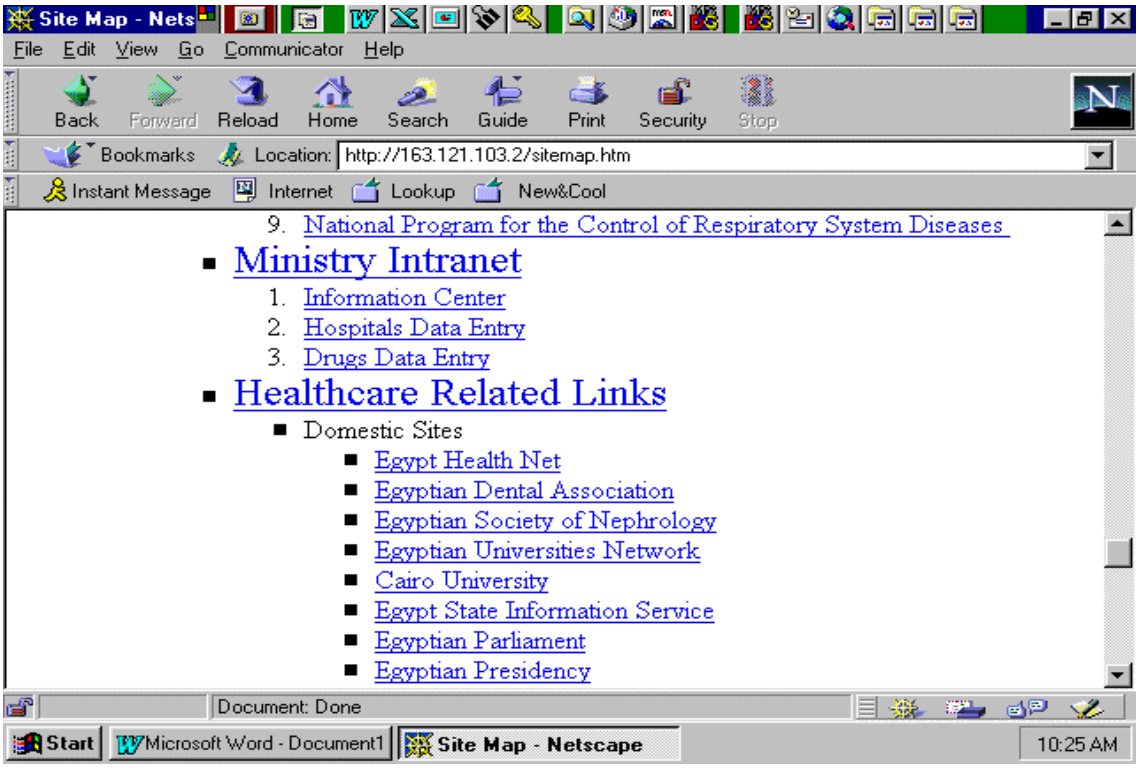
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9. National Program for the Control of Respiratory System Diseases
Ministry Intranet
1. Information Center
2. Hospitals Data Entry
3. Drugs Data Entry
Healthcare Related Links
Domestic Sites
Egypt Health Net
Egyptian Dental Association
Egyptian Society of Nephrology
Egyptian Universities Network
Cairo University
Egypt State Information Service
Egyptian Parliament
Egyptian Presidency
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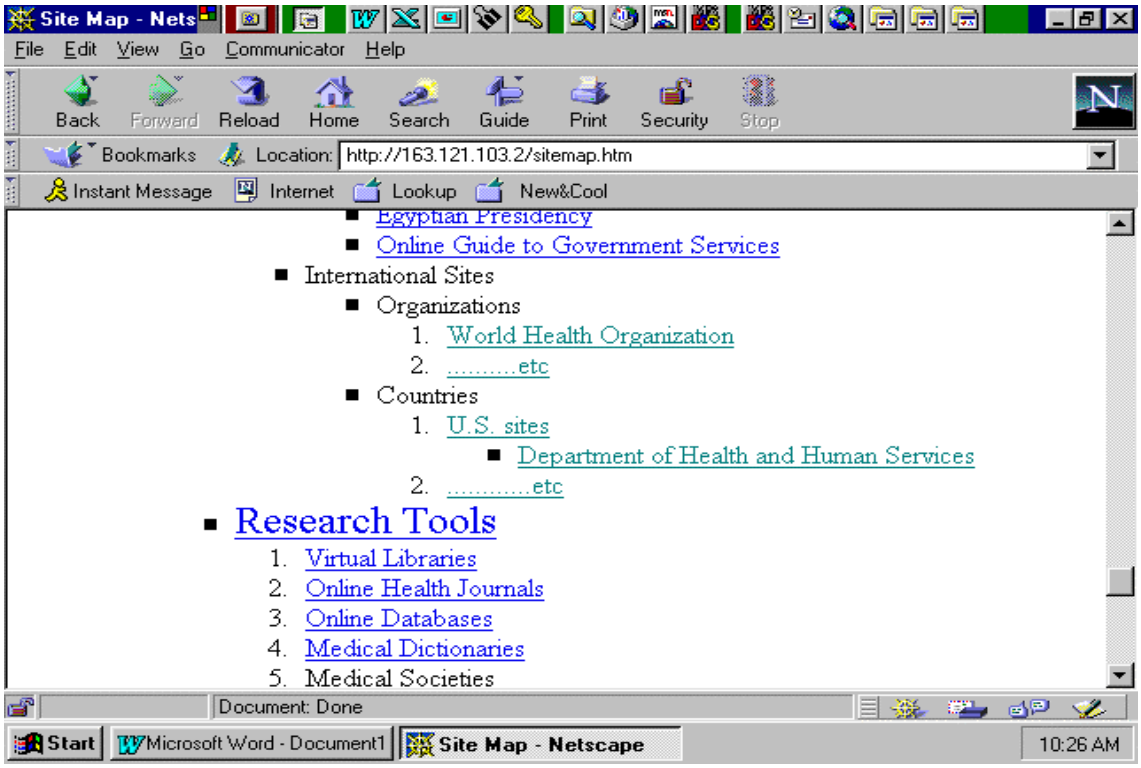
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Egyptian Presidency
Online Guide to Government Services
International Sites
Organizations
1. World Health Organization
2. .....etc
Countries
1. U.S. sites
Department of Health and Human Services
2. .....etc
Research Tools
1. Virtual Libraries
2. Online Health Journals
3. Online Databases
4. Medical Dictionaries
5. Medical Societies
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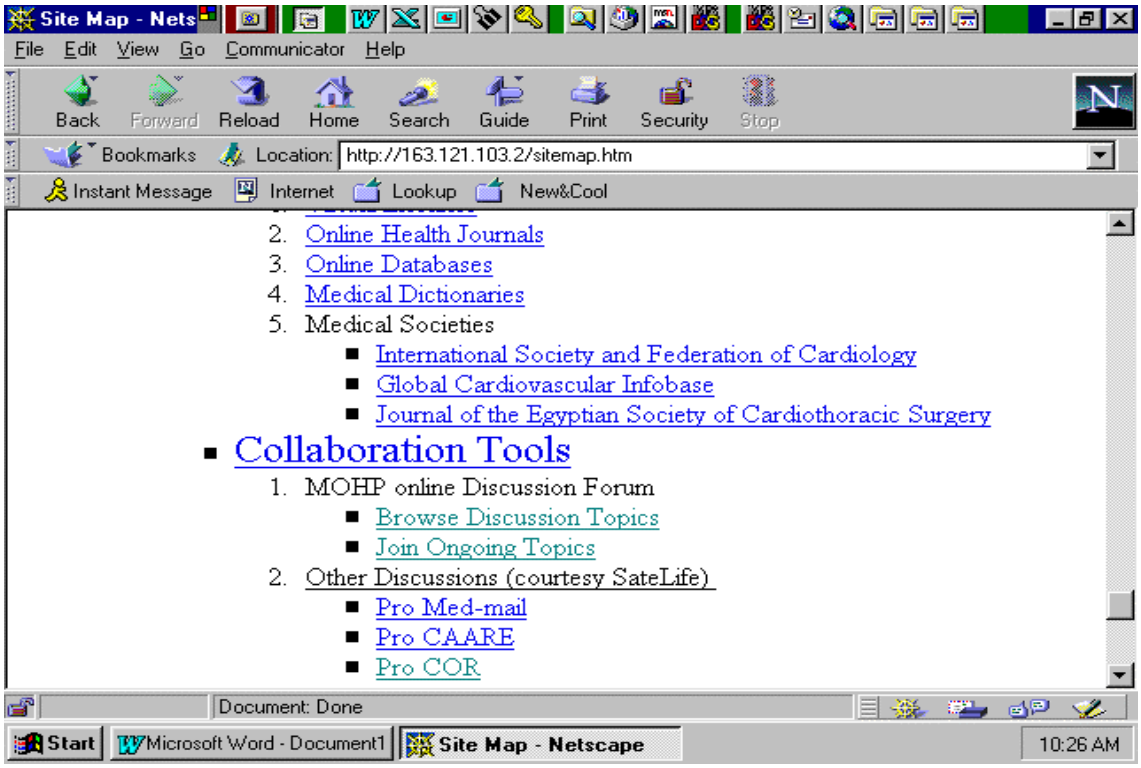
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2. Online Health Journals
3. Online Databases
4. Medical Dictionaries
5. Medical Societies
International Society and Federation of Cardiology
Global Cardiovascular Infobase
Journal of the Egyptian Society of Cardiothoracic Surgery
Collaboration Tools
1. MOHP online Discussion Forum
Browse Discussion Topics
Join Ongoing Topics
2. Other Discussions (courtesy SateLife)
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Pro CAARE
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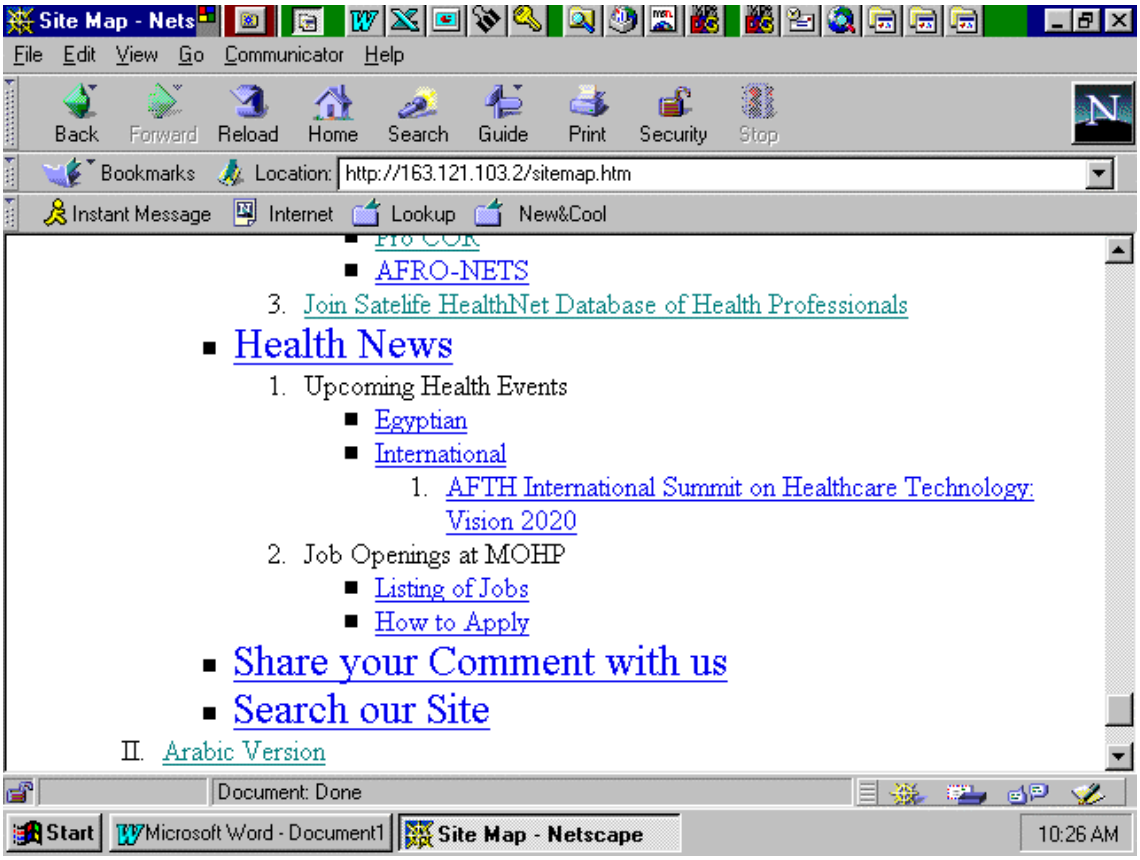
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AFRO-NETS
3. Join Satelife HealthNet Database of Health Professionals
Health News
1. Upcoming Health Events
Egyptian
International
1. AFTH International Summit on Healthcare Technology: Vision 2020
2. Job Openings at MOHP
Listing of Jobs
How to Apply
Share your Comment with us
Search our Site
II. Arabic Version
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Annex C: Glossary of Terms

Bandwidth	The data transfer rate of an electronic communications system
Clearinghouse	A central agency for the collection, classification, and distribution especially of information; *broadly*: an informal channel for distributing information or assistance
Cookies	Files placed on a user's computer by websites for tracking purposes
FTP	File Transfer Protocol
HTML	A markup language that is a subset of SGML and is used to create hypertext and hypermedia documents on the World Wide Web incorporating text, graphics, sound, video, and hyperlinks
Hypertext	Data that contains links to other data
Internet	An electronic communications network that connects computer networks and organizational computer facilities around the world.
Intranet	An electronic communications network that connects computer networks and organizational computer facilities internally within an organization.
Link	A hypertext connection to another document or location.
Listserv	Automated mass E-mailing software
Meta-tags	Keywords on a web page which are indexed by search engines
Search Engine	A computer that indexes pages and returns “hits”
Server	A computer in a network that is used to provide services (such as access to files or shared peripherals or the routing of electronic mail) to other computers in the network
website	A site on the World Wide Web.
World Wide Web/WWW	A part of the Internet designed to allow easier navigation of the network through the use of graphical user interfaces and hypertext links between different addresses—called also *Web*
Webmaster	One who oversees a website.